

HELP OR HYPE? THE ROLE OF INTERNET MARKETING IN RURAL
DEVELOPMENT STRATEGIES

by

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ABSTRACT

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International development literature suggests that Internet marketing has the potential to play an important role in rural development. Despite the abundant theoretical support for incorporating Internet marketing into development strategies, there is little empirical evidence regarding whether Internet marketing actually generates development. This thesis helps fill this gap in the literature by investigating whether one Internet marketing application associated with development, competitive-online auctions (COAs), contributes to growth and poverty reduction. An analysis of price premiums earned in Latin American specialty coffee auctions and interviews with participating coffee farmers suggest that this application's strength lies in its ability to catalyze development; it provides the foundation from which farmers can pursue above-market prices, access new markets, and improve local living conditions. However, evidence also emphasizes that COAs do not inevitably advance development goals because their ability to do so is contingent on external factors, including the actions taken by individual farmers.

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Chapter I: Introduction

Introduction

Persistent underdevelopment in rural Latin America, particularly Central America, has prompted scholars to emphasize that development strategies must strengthen their focus on rural areas if overall development is to occur. Agricultural growth must be a priority because it is closely linked to poverty reduction and growth in other sectors, and improving market access for farmers, especially into markets offering higher prices, is crucial for facilitating such growth. This evidence clearly reinforces the need to explore alternative strategies by which commodity producers can access new market opportunities offering higher prices. Scholars suggest that Internet marketing can make important contributions to rural development efforts because it may provide producers with an opportunity to earn above-market prices while also enhancing their access to market; however, there is little concrete evidence to support these claims. To add evidence to this gap in the literature, this thesis uses empirical and qualitative methods to examine the effectiveness of one Internet marketing application, the competitive-online auction, as a rural development strategy.

Competitive-online auctions (COAs) provide a useful case for studying whether Internet marketing contributes to rural development because they were specifically designed to target factors associated with development; their goal is to increase the price producers receive, enhance their access to markets, and improve rural living conditions. I focus specifically on competitive-online auctions organized to sell Latin American specialty coffees because, in doing so, I am able to study the impact of this Internet marketing on a commodity that is “sufficiently representative” of other agricultural

commodities, important to many Latin American economies, and that directly influences the livelihoods of a majority of the rural population in these countries (Li 2003, 153). To examine this question, I analyze price premiums earned in these auctions and conduct open-ended interviews with four Guatemalan farmers who have participated in these auctions. Due to the small sample size of my interviews, my findings are not conclusive; however, they do provide initial evidence that this Internet marketing tool does contribute to agricultural growth and poverty reduction by allowing farmers to earn above-market prices, enter a specialty market, engage in new market opportunities, and improve living conditions in coffee farming communities. Based on these findings, I also offer further evidence of the linkage between agricultural growth and poverty reduction.

The importance of evaluating both development approaches

Development approaches can be classified into two categories: those addressing economic development, which involves strategies to improve economic growth, and human development, which targets enhancing quality of life. Understanding the roots of each approach illustrates why both economic and human development strategies are essential to efforts seeking to advance overall development goals. For much of the second half of the twentieth century, development strategies were grounded in the idea that a country's development corresponded with its level of "industrialization and aggregate production in society" (Roy and Clark 1994, 3; de Ferranti 2005). Due to the push for industrialization, "well-being [was conflated] with either opulence or utility" and national income became the primary indicator of development (Clark 2006, 33; Seers 1972, 1).

In the 1970s, however, approaches to development began shifting, and the human development model emerged as an alternative to economic development. The literature began emphasizing that development was not merely synonymous with economic and material gains but that it also included the “improvement” of “basic human needs” such as food, clothing, and shelter and reducing “social deprivation” by providing opportunities for all to be able to afford “to participate in the activities and have the [customary] living conditions” (Seers 1972, 23; Roy and Clark 1994, 3). Scholars note that human development indicators also provide a representative picture of a nation’s development by highlighting the state of “non-market dimensions of welfare” such as health services, housing, and nutrition that are not apparent from income and consumption levels and reflecting the “quality of life of the bulk of the population, not just the... elite” (Seers, 1972, 28; Roy and Clark 1994, 3). Therefore, human development must be assessed in conjunction with economic development in order to gain a balanced understanding of how development strategies affect overall development. Examining the role that COAs play in both development approaches makes it possible to evaluate their contribution to a community’s general state of development.

Agriculture’s role in development

Current scholarship consistently agrees that agriculture positively impacts both economic and human development by improving rural growth and reducing poverty and has important implications for national development as well (see list in de Ferranti 2005, Diao and Dorosh 2007). Agriculture’s significance to development efforts is due to the large share of the economy that this sector occupies in less developed countries and its

multiplier effects on the rest of the economy; econometric analysis of the agricultural sector in these countries reveals that it is because of these multipliers that increased agricultural productivity stimulates growth in the rest of the economy (de Ferranti 2005, 74-102). Furthermore, agricultural growth is not only “critical for fostering overall economic growth,” empirical evidence overwhelmingly and consistently “supports the view that agricultural growth promotes poverty reduction” (Byerlee and de Janvry 2008, 28; see list in Dorward 2003; Rao 2002; Csaki 2003; see list in de Ferranti 2005, 41; IABD 2005, 40; Diao and Pratt 2006; Diao and Dorosh 2007; Byerlee and de Janvry 2008).

First, growth, poverty, and inequality are highly elastic and, because of this relationship, changes in rural poverty are dependent on such changes in inequality and agricultural growth. Byerlee and de Janvry (2008) reinforces the linkage between agricultural growth and poverty by noting that when non-agricultural growth is not accompanied by agricultural growth, rural-urban income inequalities rise as “rural areas remain poor” (28). Cross-country econometric analysis of GDP agricultural growth further emphasizes the importance of agriculture to poverty reduction efforts because it reveals that the agricultural sector’s impact on poverty reduction rates is twice as high as that of other sectors (Byerlee and de Janvry 2008, 29). Because of this study’s focus on Latin America, it should be acknowledged that as a country becomes more developed agriculture’s influence on poverty decreases (Byerlee and de Janvry 2008, 29). As a result, in urbanized economies such as those in Latin America, the contribution of agricultural growth to rural poverty reduction is not as great; however, agriculture still

plays a key role in development efforts by “including the rural poor as direct producers” and employing unskilled laborers (Byerlee and de Janvry 2008, 30, 38).

Within the last decade, the development literature has reached the consensus that development strategies must refocus their efforts on rural areas because of the documented importance that agriculture plays in the national economy of developing countries and the persistent, disproportionate poverty that characterizes rural areas (Roy and Clark 1994, Balisacan and Pernia 2002, Csaki 2003, de Ferranti 2005, Byerlee and de Janvry 2008). Recent estimates of international poverty rates suggest that 75% percent of those living in poverty reside in rural areas (Byerlee and de Janvry 2008). In fact, the pervasiveness of poverty in rural Latin America prompted World Bank (2003), a report that provides a new “framework” for improving both economic and human conditions in rural areas, to assert that “higher levels of extreme poverty in [rural] Latin America justify a pro-rural bias for poverty alleviation” (Csaki 2003, 3). Therefore, in light of the dire poverty that characterizes rural areas and the impact of agricultural growth on poverty rates and rural and national economic growth, it is essential to continue investigating new strategies, such as COAs, that promote rural development.

Case: the impact of the coffee crisis

Latin America’s coffee industry offers a useful case for studying the effectiveness of micro-level agricultural growth strategies while also examining the impact of these strategies on poverty reduction because this industry clearly illustrates agriculture’s importance in developing economies and highlights the relationship between agriculture, economic growth, and poverty. Coffee is the primary agricultural export for many Latin

American economies, especially in Central America, and is a labor-intensive industry in which “the majority of coffee producers are small holders living in remote rural areas” (Varangis et al. 2003, 9). Because of the dominant role coffee plays in these economies and its importance as a source of employment, fluctuations in the supply and demand of coffee as well as in commodity market prices directly impact economic growth and rural living conditions (Li 2003, 153; Varangis et al. 2003; Eakin et al. 2005).

The impact of the recent international coffee crisis on farm growth and living conditions in coffee communities emphasizes the level to which the economy and livelihoods in Latin America are dependent on the coffee market. It further reveals that the success of development efforts in these areas must be considered within the context of this event. The roots of the crisis can be traced to the collapse of the International Coffee Agreement in 1989 and the subsequent termination of the coffee export quota system (Eakin et al. 2005, 158). Without an international system to regulate coffee production and quality, individual coffee producing countries became responsible for monitoring these activities and, as a result, the market was flooded with an oversupply of coffee in the late 1990s and early 2000s (Eakin et al. 2005, 158). This oversupply, combined with the effect of stagnant demand for coffee in consuming countries and the consolidation of roasters and traders, caused international coffee prices to plunge to their lowest level in 100 years after adjusting for inflation (Ponte 2002, 13; Varangis et al. 2003, 3-4; Eakin et al. 2005, 158). This crisis negatively impacted agricultural growth rates because many countries experienced declines in coffee exports as a result of an oversaturated market, and this decrease, along with plummeting prices, significantly lowered export revenues (Varangis et al. 2003, 6). Declining productivity further hindered growth as farmers were

forced to reduce production because they were unable to compete in such as flooded market (Varangis et al. 2003, 3, 7).

The coffee crisis had an enormous impact on living conditions for hundreds of thousands in Central America as well (Varangis et al. 2003, 25). For many farmers, coffee prices were not high enough to meet the costs of production much less pay wages for farm workers and cover the costs of farm maintenance (Varangis et al. 2003, 3, 9). As coffee production fell and revenues decreased due to low output prices, the coffee industry saw unemployment soar, and Guatemala alone lost an estimated 40,000-60,000 “coffee production related jobs” in 2002 (Varangis et al. 2003, 8; IBRD 2004, 88). Low coffee revenues also forced farmers to cut wages paid to farm employees who depended solely on this income to buy food and cover the costs of education and health care (Varangis et al. 2003, 9).

Despite job losses and wage cuts, however, in 2002 alone, nearly 700,000 people, or 31% of the rural labor force, were employed in coffee production, thus highlighting that this sector remained a crucial source of employment and income in rural Guatemala throughout the crisis (Varangis et al. 2003, 8). The household surveys Eakin et al. (2005) conducted of Guatemalan coffee workers in San Pedro la Laguna during the crisis highlight the severe impact that unemployment and wage cuts caused to the livelihoods of coffee workers: 67.9% of respondents experienced a decrease in income and the crisis “negatively affected the ability” of 98.6% of respondents “to acquire basic goods,” of 78.6% “to pay school fees,” and of 89.3% “to pay medical fees” (164). From these responses, it is clear that the coffee crisis directly hampered human development in rural regions because education, health care, and nutrition took a back seat to purchasing

essentials. Therefore, this crisis illustrates the dependent relationship between market conditions, economic growth, and poverty in commodity industries and emphasizes the need to examine both the economic and human components of development strategies to determine their impact on overall rural development.

Due to the development challenges still present in Latin America, especially Central America, and the direct relationship between growth and poverty reduction, it is important to examine micro-level strategies through which countries can improve agricultural growth and reduce poverty. The literature consistently recognizes that a farmer's ability to access markets for his/her product is instrumental for stimulating agricultural growth because it positively impacts producers' competitiveness and productivity (Dorward 2003; de Ferranti 2005, 16, 19, 43-44; Diao and Dorosh 2006; Diao and Dorosh 2007; Byerlee and de Janvry 2008, 118). Enhancing farmers' market access is also linked to poverty reduction due to its ability to generate employment and increase incomes (de Ferranti 2005, 40; Byerlee and de Janvry 2008, 118). As a result of its contribution to both growth and poverty, de Ferranti (2005) recommends that rural development strategies "focus on strengthening farmers' connections to market through supply chain management structures,"¹ and Byerlee and de Janvry (2008) identifies "enhanc[ing] smallholder competitiveness and facilitat[ing] market entry" as one of the primary policy objectives required for agriculture to contribute to development (xxi; 228). Therefore, because a producer's ability to access markets is central to an area's agricultural growth and poverty rates, strategies aiming to improve farmers' access to markets deserve the attention of studies such as this which examine proposed solutions to

¹ This statement justifies using competitive-online auctions, which are a form of supply chain management, to study whether this Internet marketing strategy improves market access.

rural underdevelopment. It is becoming increasingly popular to incorporate Internet marketing applications into these efforts despite the lack of empirical evidence proving whether they truly achieve their goals, and by examining the impact of competitive-online auctions for specialty coffee on rural growth and living conditions, this thesis aims to contribute evidence to this literature.

Chapter II: Literature Review

The Internet as a tool for rural development?

There is a growing literature that discusses the role that information and communication technologies (ICTs), especially the Internet, play in rural development strategies. Scholars overwhelmingly agree that the presence of the Internet in developing countries does not directly spur development and that it should not be viewed as “an end in itself” (Marker et al. 2002, 4). However, there is a consensus that the Internet is an “essential too[I] of development” and has the “enormous potential” to facilitate activities that lead to economic growth and poverty reduction (Pigato 2001; Adeya 2002, 10; Marker et al. 2002; Kenny 2002; Rhodes 2002; Cecchini 2002; Edwards 2002; Proenza 2002; Goldstein and O’Connor 2002; Csaki 2003, 50, 51; Li 2003; Schware 2005, xiii; Banker and Mitra 2005, 105). Nevertheless, it is the degree to which the Internet aids development efforts and the specific growth and poverty indicators it impacts that cause disagreement.

The lack of empirical evidence regarding the Internet’s role as a development tool makes it difficult to resolve this debate because, as many scholars themselves point out, much of the existing research is either “anecdotal,” “speculative,” “based on theoretical

arguments,” or simply a “progress report” of existing Internet programs, and many emphasize the need for empirical research to confirm the role the Internet plays in economic and human development (Miller 2001, 12; Adeya 2002, 6; Goldstein and O’Connor 2002, 7; Kenny 2002, 1; Mansell 2002, 283; Paré 2002, 4; Rhodes 2002, 270; Banker and Mitra 2005, 105; Schware 2005, 1). I address this empirical gap in the literature by offering both qualitative and quantitative evidence regarding whether Internet marketing can be used as a tool for economic growth and as a means of improving living conditions. I specifically examine the role that competitive-online coffee auctions, a form of Internet marketing, play in achieving these development goals and hypothesize that they make a valuable contribution to economic and human development strategies. By evaluating the impact of competitive-online auctions on both development approaches, I also contribute evidence to the discussion regarding the linkage between agricultural growth and poverty reduction.

Market access and higher prices via Internet marketing

The debate regarding whether Internet usage is an effective economic development tool is multi-faceted, and scholars focus on its impact on four factors 1) firm productivity (Pigato 2001, Edwards 2002, Kenny 2002a, Rhodes 2002, Schware 2005), 2) transaction costs (Edwards 2002, Rhodes 2002), 3) overall firm growth and competitiveness (Kenny 2002a, Adeya 2002, Schware 2005), and 4) poverty reduction (Pigato 2001, Cecchini 2002, Kenny 2002b, Proenza 2002, Adeya 2002, Marker et al. 2002, Schware 2005). However, one important yet often “ignored” aspect of the IT debate concerns how rural producers who use the Internet for business activities are able

to “transform the agricultural supply chain” in their favor by entering new markets and earning higher prices for their crop, activities that scholars agree are important for achieving economic growth and/or reducing poverty (Rodrik 2000, 20; Khan 2001; Killick 2001, 160; Pigato 2001, 3; Mansell 2002, 283; Marker et al. 2002, 11, 13, 56; Cecchini 2002, 93; see list in Adeya 2002; Rhodes 2002, 282; Tregurtha and Vink 2002; Li 2003, xvii; Csaki 2003, 50, 51; IBRD 2004, 26; Banker and Mitra 2005, 97, 105; de Ferranti 2005 xxi; Schwabe 2005; Banker and Mitra 2007, 310; Diao and Dorosh 2007, 289).

Although this thesis is interested in how the Internet can be incorporated into both economic and human development strategies, the literature review focuses only on its impact on agricultural growth. To do so, it examines how effectively Internet marketing enables rural businesses to enter new markets and earn higher prices for their products. Several case studies broadly discuss how developing countries have used the Internet to enable rural enterprises to experience the “envisioned downstream benefits of connectivity such as wider access to markets” (Lallement et al. 2006, 49). However, studies offering concrete evidence of the way in which rural firms in developing countries have or have not benefited from Internet marketing specifically are sparse, and the empirical studies that do exist provide contradictory evidence regarding whether Internet marketing actually stimulates economic development. Therefore, it is important for studies such as this thesis to test the hypothesis that Internet marketing contributes to the rural growth and to investigate how these benefits do or do not translate into human development.

1. Market access via B2B e-markets

According to the 2003 UNCTAD *E-commerce and Development Report*, e-markets and online auctions are the most common forms of Internet marketing (Li 2003, 161). E-markets are categorized as business-to-consumer markets (B2C) and business-to-business markets (B2B), and both have been discussed within the context of development. However, because this thesis investigates the impact of competitive-online auctions on rural development and these auctions are a type of B2B marketing, I will limit my discussion to B2B e-markets. Within the narrow literature available on the participation of agricultural enterprises in Internet marketing, several studies discuss how producers market their products online by participating in a type of B2B e-market known as an Internet portal. Internet portals are one of the most popular types of e-markets and provide an online marketplace where producers and buyers can use a common Internet platform to market their products and conduct transactions (Tregurtha and Vink 2002, 1; Li 2003, 162). Scholars agree that e-markets have the potential to facilitate new market transactions and promote greater market access; however, they are careful to emphasize that this strategy has yet to yield the expected results.

Two studies discuss the impact of e-markets on market access but do not offer empirical evidence to support their conclusions. Li's (2003) examination of Internet portals in the coffee industry is optimistic that "e-markets represent potential benefits for the marketing of exports;" however, when discussing whether e-markets have actually met these expectations, the report is cautious about strongly supporting such marketplaces (165). Following its examination of coffee e-markets, the report emphasizes that these markets have not yet developed into a popular or effective form of marketing coffee and that many coffee e-markets now "cease to exist" (Li 2003, 164).

Miller (2001) discussion of e-markets offers similar conclusions and briefly discusses two, new B2B Internet portals used by Indian producers and buyers, Indiamarkets.com and Kagaz.com. He reveals his optimism about the potential for Internet portals to develop into an effective online marketing tool by emphasizing that the mission of these websites is to “offer a full e-commerce portal” and “promote business between potential trading partners” through online bulletin boards where producers and buyers can post their products/needs (Miller 2001, 9, 8). The article suggests that these portals are achieving this goal because Indiamarkets.com, for example, has over “2,000 hits and 150 transactions per day” (Miller 2001, 8). Furthermore, although he acknowledges that participation in these portals has been hindered by common website problems and difficulties associated with breaking traditional purchasing habits, he remains optimistic that, with time and modifications, Internet portals will be prove to be capable of helping farmers reach new markets and buyers (Miller 2001, 9). However, Miller (2001) does not explain whether, in the case of Indiamarkets.com, farmers are engaging in transactions with new buyers or simply continuing relationships with previous buyers who have shifted from traditional to online purchasing methods. Therefore, despite the article’s initial confidence and assertion that B2B Internet portals will be “part of [improved transaction capabilities]” in developing countries, it remains unclear whether these platforms actually help producers encounter new market opportunities or access new markets (Miller 2001, 12).

Tregurtha and Vink (2002) and Paré (2002) repeat the conclusions found in Li (2003) and Miller (2001) but, unlike these studies, they offer empirical evidence to support claims that e-markets have not yet lived up to their expectations. Tregurtha and

Vink (2002) interviews four horticulture farms in rural South Africa regarding their participation in e-commerce and activities associated with Internet marketing and found that two of the farmers did use an Internet portal, what they term an “extranet website,” to obtain “financial data from [their] exporter” and “consolidated market information;” however, none of the respondents used the online marketplace to conduct transactions with buyers (Tregurtha and Vink 2002, 15). Furthermore, although Tregurtha and Vink’s (2002) findings report that farmers themselves allege to have benefited from this type of B2B marketing, the study concludes that Internet usage was most effective and popular for “process based... e-commerce” such as information exchanges between buyers and sellers rather than “transaction-oriented” activities (Tregurtha and Vink 2002, 11). However, the study does not discuss whether such information exchanges between buyers and sellers later resulted in transactions or contracts conducted via traditional methods, a finding that is essential for confirming whether B2B Internet marketing indirectly improved market access.

Paré (2002) directly addresses the issue of B2B Internet marketing portals and their impact on international market access for rural firms in developing countries. The study conducts interviews with firms in the garment and horticulture sectors in Kenya, South Africa, and Bangladesh, and the empirical results from these interviews do not support the general assumptions about the “likely impact of B2B e-commerce” (Paré 2002, 6). Despite local e-readiness, 83% of garment firms and 66% of horticulture/agricultural firms had not used Web-based e-markets (Paré 2002, 7). Furthermore, only ten of the seventy-four registered e-marketplace users used the Web bulletin boards to post available products and, of these ten, only four resulted in a sale

(Paré 2002, 8). These findings suggest that “very little business with new customers/clients is being generated... through Web-based e-commerce,” and there is “little evidence of support for... transactions online using Web-based B2B e-hub interfaces” (Paré 2002, 7). Together these studies indicate that although B2B e-markets clearly have the potential to facilitate new market transactions for rural firms, they have not yet proven to be capable of fulfilling these goals.

However, it is important to recognize that the degree to which B2B e-markets generate market opportunities and market access is influenced by factors unrelated to the marketing method itself. Both Paré (2002) and Tregurtha and Vink (2002) suggest several reasons that e-markets did not facilitate business transactions and none are related to problems with the online mechanism itself. Tregurtha and Vink (2002) finds that factors such as inadequate website management and Internet infrastructure deterred farmers from using this resource because interviews with farmers who have the extranet revealed that the “slow download time of the site and the timeliness of the information posted... detract[ed] from the value of its service” (Tregurtha and Vink 2002, 15). The responses Paré (2002) includes agree with these observations and users commented that “lack of information specificity and slow connection speed” were the primary reasons that many chose not to use the e-market to search for new “export markets or potential trading partners” (8). Therefore, the quality of an area’s Internet infrastructure and its ability to maintain the e-market platform must be considered when discussing whether B2B e-markets are an appropriate rural development approach for certain regions or whether existing e-markets have facilitated market access and business opportunities because these factors strongly influence these objectives.

2. Market access and higher prices via B2B Internet auctions

The *2003 UNCTAD E-Commerce and Development Report* defines online auctions, also known as e-auctions, as the second primary method of Internet marketing (e-markets being the first) (Li 2003, 161). Because online auctions are a new marketing strategy, their impact on market access and prices “has been inadequately analyzed in the... literature” (Banker and Mitra 2005, 105). Several reports broadly discuss the benefits of online auctions in the specialty coffee and tea industries and, like much of the literature discussing Internet marketing’s role as a development tool, there is little empirical or quantitative evidence to support or refute these claims. First, Martin Scholer’s article in OECD’s 2002 *E-commerce and development* report includes a short case study of the first Internet coffee auction held in 1999 and makes broad claims about its “encouraging results” (Scholer 2002, 125). Unfortunately for the purposes of this thesis, the report merely provides details about pre-auction planning and the auction process rather than specific information about the outcome of the auction and its impact on producers. Although it emphasizes that coffees sold in these auctions earned “prices substantially above expectations” and is optimistic about the strategy’s ability to help producers enter new, higher paying markets and connect with new buyers, it does not include data or interviews to support this assertion (Scholer 2002, 122).

Ponte (2002), Daviron and Ponte (2005), and Li (2003) (aka *2003 UNCTAD E-Commerce and Development Report*) also provide general overviews of online auction programs for specialty coffee and the economic benefits they offer without including data to support them. However, they do offer a slightly more detailed discussion than Scholer

(2002) regarding how online auctions for coffee impact market opportunities for coffee producers and the prices they receive for their product. These three studies agree with Scholer (2002) that online coffee auctions “have provided high [price] premiums directly to producers” and allow “producers to retain a larger share of the export price” by removing intermediary costs and reducing the “disparity in market power” that favors buyers and lowers prices (Daviron and Ponte 2005, 157; Li 2003, 161; Banker and Mitra 2005, 98, 101). Again, although these studies endorse online auctions as a tool for improving market opportunities and earning higher prices, with the exception of the final auction prices published in Li (2003), they do not offer empirical evidence to substantiate their claims.

Whereas the literature regarding online coffee auctions is positive about their influence on prices, Li’s (2003) discussion of online tea auctions in India offers a more cautious appraisal of this marketing application. Processed tea is traditionally sold through a physical auction or a broker, and the report notes that while online tea auctions generated a premium over physical auctions and provided farmers with an alternative market in which to sell their product, “the differences in prices between online and conventional auctions [were] small” (Li 2003, 160, 171). The report attributes this low premium to buyer familiarity with tea prices offered at conventional auctions and uncertainty about the risks associated with online transactions (Li 2003, 171). However, it emphasizes that, at the time of the report’s printing, Indian tea auctions were in their infancy and that “India’s tea industry is optimistic that such auctions will become established” with time (Li 2003, 171). The inconsistency between the evaluation of coffee and tea auctions suggests that online auctions may not be a tool that guarantees

farmers higher prices and market access and, therefore, requires further study to determine the conditions under which online auctions generate these opportunities.

Donnet et al. (2007b), Banker and Mitra (2005), and Banker and Mitra (2007) confirm the anecdotal support the above literature bestows on online auctions because of their impact on prices by providing empirical analysis of the price premiums earned at online auctions. Banker and Mitra (2005) presents a case study of electronic coffee auctions held in India and compares the price farmers receive in these auctions with those received in traditional, physical coffee auctions. By regressing the prices earned in weekly electronic and physical coffee auctions between 2002 and 2003, the study found that the prices earned via online auctions were 4% higher than those earned in physical auctions and that this difference was statistically significant (Banker and Mitra 2005, 103). The article recognizes that this price premium is “modest,” yet it also emphasizes that the difference has increased over time and should continue to increase as buyers gain confidence in the method (Banker and Mitra 2005, 105). Banker and Mitra (2007) suggests that online coffee auctions have continued to provide farmers with a premium over physical auction prices because, after reviewing online trading websites and interviewing ITC personnel, it was clear that Indian coffee farmers who participated in non-mediated online auctions experienced “increase[d] margins due to direct sales to buyers” (317). Donnet et al. (2007b) also contributes to this literature by analyzing the prices earned at competitive-online specialty coffee auctions known as the Cup of Excellence auction and the Q auction. Hedonic analysis of auction prices versus the traditional market price highlights that, in both cases, auction prices were above the market price (Donnet et al. 2007b, 14). Because this study limits its data sample to

auctions conducted between 2003 and 2006, further research is needed to see if this price premium has continued.

It is important to recognize that because online auctions are a new marketing strategy there is still “concern” regarding whether “the online platform will actually translate into higher commodity prices for producers” (Banker and Mitra 2005, 98). For example, Banker and Mitra (2005) emphasizes that governments are still especially “cautious in granting permission [to organize such auctions] without adequate protection for producers” (Banker and Mitra 2005, 98). However, unlike the contradictory evidence available concerning B2B Internet e-markets, the preliminary evidence these studies report generally agree that online auctions are an effective online marketing method by which rural producers can earn higher prices for their product.

On the other hand, scholars are divided over whether online auctions have enabled farmers to access new market opportunities; however, there is little empirical evidence to sustain these claims (Ponte 2002, 19; Li 2003, 171; Evans 2003, 2; Daviron and Ponte 2005, 158; Donnet et al. 2007b, 3, 14). Ponte (2002), Daviron and Ponte (2005), and Li (2003) praise the potential for online coffee auctions to improve farmer’s market access by enhancing his/her visibility in the marketplace because, as Daviron and Ponte (2005) summarize, this “market recognition can be followed by the building of long-term relationships with buyers” (19). Daviron and Ponte (2005) also highlights that the quality information about the coffees participating in the auction that these events make available to buyers “may lead to future direct contracts” but does not offer conclusive evidence to support this assertion (158).

Li (2003) however, offers a different perspective concerning online tea auctions. It suggests that India's online tea auctions have not been as successful in attracting new buyers. At the time of the report's printing, the popularity of auctions remained low and, although online tea auctions "maintained a steady market volume," unstable market conditions made new buyers and exporters resistant to engage in online auctions (Li 2003, 170). In spite of the discrepancy between the new market opportunities tea and coffee auctions facilitate, Li (2003) directly claims that online auctions have been much more successful than e-markets, such as the B2B Internet portals discussed above, in attracting both buyers and producers to the online marketplace (Li 2003, 165). However, to accept the validity of these claims one must turn to the results of empirical studies that have investigated the impact of online auctions on the supply chain.

Evans (2002) interviews farmers, roasters, and importers who participated in Central America's first competitive-online auctions about whether these auctions facilitated market access and generated new market relationships for producers. Based on these responses, it vehemently concludes that, as of 2002, auctions had not "resulted in access to a broader market" because they did not serve as an outlet through which farmers could sell large-volume lots (2). However, it does not consider whether auctions facilitated new market opportunities for farmers following the auction by enabling them to negotiate contracts for large-volumes of coffee at a later date. It also disregards the fact that, in 2002, auctions were only in their first or second year of existence and had not yet had time to fully develop. Banker and Mitra's (2007) study of online coffee auctions in India recognizes the online auction format as a new procurement model for coffee buyers and, based on interview responses from coffee farmers, suggests that it could alter

the coffee supply chain by changing how buyers procure their coffee (310). However, it does not explicitly address whether the online platform has improved market access for farmers. Donnet et al. (2007a) uses hedonic analysis to analyze the role online auctions play in a coffee buyer's procurement strategy. It concludes that online auctions "facilitate the procurement of new specialty coffees in an expanding market [and] are important in the discovery process" of new coffees, thus suggesting that producers are engaging in a new market as well as forming relationships with new buyers by participating in the auction (Donnet et al. 2007a, 26). Nevertheless, like the rest of the literature, this assertion does not draw on specific cases to prove that online auctions have actually generated these market opportunities.

The empirical literature that exists regarding online auctions is based the results of a small sample of early auctions and, as a result, does not offer conclusive evidence that this Internet marketing strategy leads to greater market access and higher prices for farmers. Although preliminary evidence suggests that the online auction model is one form of B2B Internet marketing that yields higher prices and greater market access for farmers, there is clearly a need for further research to investigate whether this application has contributed to rural economic development efforts.

Conclusion

Schware (2005) summarizes the literature's general consensus regarding the Internet's impact on development by stating that "it has become commonplace to laud the potentially huge role the Internet can play in the development process. ... [yet] we know little about the impact of these technologies, and it remains relatively difficult to evaluate the effectiveness of past and current practices in the field" (1). As a review of the

literature shows, this statement is especially true when examining how Internet marketing has influenced the ability of rural enterprises to access new markets and earn higher prices for their products. Much of the literature agrees that the Internet does not directly spur development but that it can be a tool that offers producers and firms “significant opportunities” for rural enterprises to access global markets (Mansell 2001, 290; Adeya 2002, Goldstein and O’Connor 2002, Li 2003, Banker and Mitra 2005, Schware 2005). Scholars also note that the empirical studies participating in this debate are not only scarce but that they offer contradictory findings and, therefore, that further “empirical research is needed” (Mansell 2001, 293; Pigato 2001, Adeya 2002, Goldstein and O’Connor 2002, Marker et al. 2002, Kenny 2002, Rhodes 2002, Cecchini 2002, Edwards 2002, Proenza 2002, Li 2003).

This study helps to fill the gap in the literature regarding whether the Internet, specifically Internet marketing, promotes agricultural growth. By focusing on one specific form of Internet marketing, competitive-online auctions, this thesis adds empirical and quantitative evidence to the small body of scholarship in this debate by investigating whether this strategy enables rural firms to expand into new markets, engage in new market opportunities, and obtain higher prices for their product. However, this study is also interested in the impact of these auctions on poverty reduction and, because there are no empirical studies that investigate this relationship, this study makes an important contribution to this gap. Furthermore, by examining how competitive-online auctions contribute to both economic and human development, this thesis offers evidence to the discussion regarding the linkage between agricultural growth and poverty reduction.

Chapter III: Hypotheses and description of competitive-online auctions

Hypotheses

I use competitive-online auctions (COAs) organized in the Latin America specialty coffee industry as a case study to examine whether Internet marketing facilitates agricultural growth and human development. Through this analysis, I also contribute to discussions regarding the linkage between agricultural growth and poverty reduction. I test four hypotheses to evaluate the extent to which COAs contribute to factors associated with economic and human development as well as examine the relationship between growth and poverty reduction.

Hypotheses 1, 2, and 3 (see list below) concern how COAs influence economic growth in coffee regions, while hypothesis 4 focuses on the impact of COAs on human development in these areas. I will use the conclusions I draw after testing hypotheses 1-4 in order to discuss my findings within the larger context of the linkage between agricultural growth and poverty reduction.

Hypothesis 1: COAs are an Internet marketing tool that provides coffee farmers selling the same quality coffee with an opportunity to earn an above-market price for one lot of their coffee. I analyze the price differential between auction prices and commodity market prices to test this hypothesis.

Hypothesis 2: COAs are an Internet marketing tool through which farmers can indirectly earn a higher, long-term price for their product. I use farmers' responses to open-ended questionnaires to test this hypothesis.

Hypothesis 3: COAs are an Internet marketing tool that enables farmers participating in the final auction to access new market opportunities by entering new markets and establishing relationships with new buyers. I use farmers' responses to open-ended questionnaires to test this hypothesis.

Hypothesis 4: COAs are an Internet marketing tool through which farmers can improve living conditions on their farms or farming communities. I use farmers' responses to open-ended questionnaires to test this hypothesis.

Description of the competitive-online auction process

All COAs take place once a year following the coffee harvest and involve two steps 1) “a cupping competition in which the sensory attributes of coffee are evaluated” and 2) an Internet auction in which coffees that qualified for the auction through the cupping competition are auctioned and sold to the highest bidder (Donnet et al. 2007c, 9).

COAs are classified into three programs: the Cup of Excellence program (CoE), the Q program, and independent SCAA programs; as of 2009, CoE and SCAA continue to be organized but the Q program was terminated in 2006. Individual countries decide which auction program/s (if any) they want to host and then coordinate their own respective auction/s. As a result, farmers compete only against other farmers from their country. Both the CoE and SCAA auctions sell small volume lots and each lot generally represents only one farm and contains approximately 20 bags of coffee from that farm (Magid 2004; Donnet et al. 2007b, 4). On the other hand, the Coffee Quality Institute sponsored the Q program, and coffee was sold in large volume lots (Magid 2004). Because “lots [were] measured in terms of the volume of a standard shipping container,” the Q lots did not exhibit the distinctiveness that characterizes CoE lots because several farmers combined their lots in order to meet the quantity required to participate in the auction (Donnet et al. 2007b, 4). All CoE auctions are organized directly by the Alliance for Coffee Excellence while SCAA auctions are organized by the Specialty Coffee Association of America (SCAA) Marketing Partners, and use the SCAA online platform

to conduct auctions (Magid 2004). Unlike with CoE auctions, because SCAA auctions are organized by different organizations, each COA sets its own selection process and quality requirements (Magid 2004). Several countries have chosen to organize independent auctions based on the SCAA online platform: 1) Panama's "Best of Panama," which was implemented in conjunction with the Coffee Quality Institute, 2) Costa Rica's "Crop of Gold," and 3) Guatemala's "Exceptional Cup," which was organized by ANACAFE, Guatemala's national coffee association (Magid 2004, SCAA auction platform website). The following is a detailed description of the steps involved in the CoE competitive-online auctions and is helpful for understanding the processes involved in this marketing strategy.²

Before discussing the competition-auction process itself, it is important to understand who is eligible to participate in the CoE. According to the Alliance for Coffee Excellence, the program was established in order to enable "any farmer anywhere in the country to submit a sample without a fee" and, therefore, farmers are not required to meet any eligibility criteria in order to enter a sample of his/her coffee into the CoE in his/her respective country (Cup of Excellence). All farms, regardless of size, soil type, altitude, cultivation styles, processing methods, etc, are permitted to enter the competition-auction. In fact, reviewing the specific information the CoE website provides about the farms that participated in the final auction reveals that farms of all sizes qualified for the auction. For example, surveying the farms participating in the 2007 and 2008 Guatemala CoE programs suggests that uncharacteristically large farms do not dominate the event. Overall farm acreages ranged from one hector to 750 hectares and, in the 2007 CoE, twelve out of nineteen farms had less than 100 acres of coffee

² Unless otherwise noted, all information was retrieved via the official Cup of Excellence website.

fields and eight out of these nineteen farmed on less than fifty hectares. This trend continued in 2008, with twenty out of twenty five farms having less than 100 acres of coffee fields and seventeen of these farms grew coffee on less than fifty hectares. The only restriction placed on roasters and importers wanting to bid in the auction is that they must first register to be members of the Cup of Excellence program. There is a fee associated with program membership, and this fee varies depending on the CoE services the company wants to utilize.

The first stage of the CoE is the quality competition and begins with farmers submitting a sample of coffee from the lot they hope to auction. The volume of competitors is then reduced to approximately 150 through a pre-screening process involving “visual inspection and cupping analysis” to select the highest quality entries (Donnet et al. April 2007, 10; Cup of Excellence). These samples continue into the second stage of the competition where a national jury composed of trained cuppers from the auction’s host country “cup[s] and rate[s] [these coffees] according to their quality on a 100-point scale” (Donnet et al. 2007b, 3-4). This stage lasts three days and consists of two rounds of cupping and scoring; the first round involves all prescreened coffees and the second round scores only those coffees that ranked in the top 80 after the first round. Those coffees scoring at least 84 points in the second round continue to the third stage of the competition where they are judged by an international jury composed of international coffee professionals who are typically roasters.³ This stage lasts five days and includes two rounds; the first round reduces the number of entries to 45 coffees, these coffees move to the second round, and those coffees earning 84 points or above in this round are

³ Jury members are not paid by the auction program and are generally volunteers, although they may be paid by the company they work for.

awarded the Cup of Excellence. The top ten coffees earning this title are cupped again, and one is awarded the title of the overall “Cup of Excellence.”

All coffees winning a Cup of Excellence award are then sold in an Internet auction approximately five weeks following the competition. The quality rating each winning coffee earned at the competition, along with a sample of the coffee, are first sent to potential bidders (Donnet et al. 2007b, 4). CoE auctions are unique in that they also send potential bidders a technical description of the coffee and information about the farm where the sample was grown (Donnet et al. 2007b, 4). One week prior to the online auction, bidders can log onto the Cup of Excellence website and familiarize themselves with the auction process by participating in a Test Auction. The final auction typically begins at 9:00 am EST and continues until bidding has stopped, which, on average, takes four hours. All bidding takes place through an online platform, and bidders can see all bids as they are made; while only registered bidders have access to the live auction website, anyone can view the “delayed auction” posted on the public Cup of Excellence website (Li 2003, 162). Participants are allowed to bid on more than one lot, and bidders can either bid on a lot with the intention of keeping it for his/her own company or act as a representative for group of roasters that has agreed to share the lot following the auction. After the auction, farmers receive the majority of the money earned but, to help cover the cost of the event, they are required to pay an auction commission based on the auction price they received. They are also responsible for all export, milling, and marketing costs associated with exporting the coffee to the winning bidder.

The following chapter examines whether COAs have sustained the price premiums documented in Donnet et al. (2007b) and, in doing so, suggests whether they

are a strategy through which producers can earn a one-time premium for a portion of their crop.

Chapter IV: A strategy to earn a one-time price premium?

Hypothesis 1: COAs are an Internet marketing tool that provides coffee farmers selling the same quality coffee with an opportunity to earn an above-market price for one lot of their coffee.

Description of data analysis method

To test hypothesis 1, I analyze the price premium COAs earn over traditional market prices to determine whether auctions provide an opportunity through which farmers can earn an above-market price for their CoE crop. I do so by comparing two prices: the price per pound earned at every Latin American specialty coffee auction organized since auction programs began in their respective countries and the price per pound at which specialty coffee would have traded on the traditional market on the day of the auction. To calculate this price differential I use the formula $(P-MP)/MP=D$ where P is the price earned in the online auction, MP is the traditional market price, and D is the price differential. This is the same formula Banker and Mitra (2005) use to measure the difference between the price earned in physical and online coffee auctions in India.

As segments of the industry are “moving away from price-based purchasing” and towards a pricing strategy that takes into account product variety, quality, and production costs, specialty coffee prices have become “delinked” from the New York Coffee, Sugar, and Cocoa, and Sugar Exchange (NYCSCE), the futures trading platform on which mainstream and specialty coffee are traditionally bought and sold (Daviron and Ponte 2005, 152; Donnet et al. 2007b, 6). To account for this shift, the literature recognizes the

International Coffee Organization (ICO) composite price index as “the common benchmark price” for specialty coffee, and, therefore, I compare auction prices with the ICO composite index price on the day the auction was conducted (Donnet et al. April 2007, 10). This price provides an “overall or composite price [that reflects the] aggregated daily movements in the price of coffee” by taking the weighted average of the indicator price in each of the four “price groups” in which coffee is sold: Colombian mild Arabicas, other mild Arabicas, Brazilian and other natural Arabicas, and Robustas (van Hilten 2002, section 1.04.02). The prices are “weighted according to their relative shares in international trade” (van Hilten 2002, section 1.04.02).

Donnet et al.’s (2007b) hedonic analysis of the price premium earned at CoE, SCAA, and Q auctions offers strong evidence that farmers participating in these online auctions received “price premiums over the standard commodity price” (14). Because discovering opportunities through which commodity producers can earn a higher price for their product is central to agricultural growth strategies, I analyze whether auctions have continued to maintain these premiums by expanding the data set used in Donnet et al. (2007b). Whereas Donnet et al. (2007b) limits its analysis to 22 CoE auctions held in Latin America between 2003 and 2006 and all 9 Q auctions held in this region between 2005 and 2006, my data set includes the results from all 44 CoE auctions, 13 Q auctions, and 10 SCAA auctions held in Latin America between 1999, the first year the region began organizing auctions, and December 2008. Therefore, the results of my analysis will offer stronger evidence of this premium, and, if the expanded data set proves that it has been maintained, my analysis will reinforce the consistency with which COAs

produce above-market prices. Following this analysis, I will examine the factors responsible for generating these results.

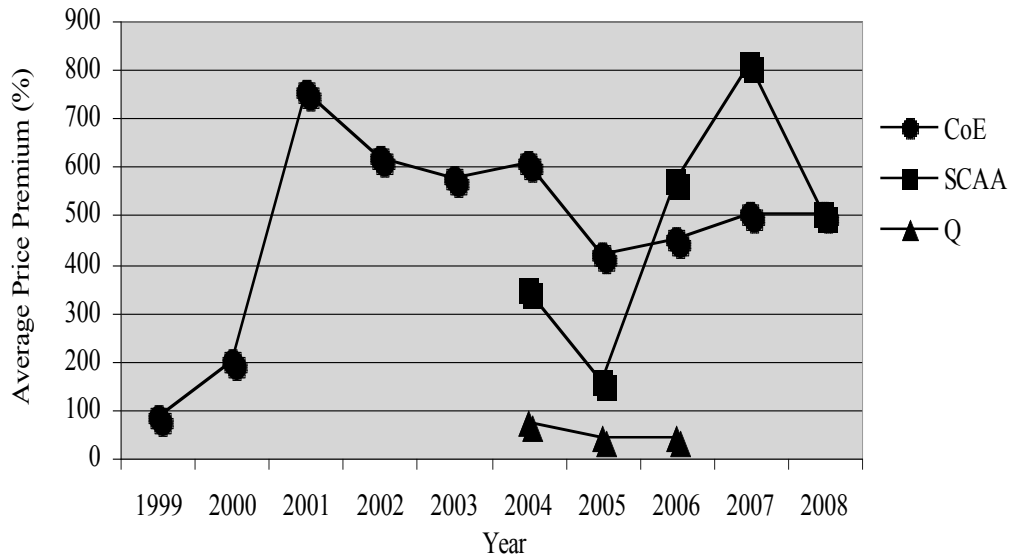
Results of price analysis

This section examines whether farmers participating in Latin American CoE, SCAA, and Q auctions earned above-market prices for their coffee at the auction. The results of the price analysis confirm hypothesis 1 by finding that auction prices earned a substantial price premium over traditional market prices. After comparing the average percentage difference between auction and market prices, my analysis shows that, regionally, CoE, SCAA, and Q auctions respectively earned an average price 471.71%, 576.64%, and 47.0% higher than market prices. I will later discuss the factors that contributed to these premiums as well as explain why Q auctions earned comparatively lower premiums. It is also important to recognize that all auctions continued to maintain a significant premium over the market price despite the fact that the traditional market price for coffee began to rise after 2001. Graph 1 (see next page) summarizes the average price premium participants in each auction program earned each year an auction was organized.⁴ Tables 1, 2, and 3 in Appendix 1 provide a detailed summary of the results of the price analysis and results are categorized by auction program,

⁴ All ICO composite indicator prices were received directly from the International Coffee Organization, the sole organization that keeps a record of such prices. CoE prices were obtained via the “Auction results” section of the official Cup of Excellence website. SCAA prices and select Q prices were obtained from the official SCAA online Internet coffee auction website, and the remainder of Q prices were obtained from Dr. Laura Donnet, a scholar also studying CoE and Q auctions, who received them from the Coffee Quality Institute, the organization that coordinates the Q auction program.

host country, and year. A dash in the table indicates that an auction was not organized in that country during that year.

Fig 1. Average Price Premium Earned at Each Auction Program per Year



Factors contributing to auction premiums

There are several reasons that explain why COAs generate above-market prices, and these factors can be divided into two categories: 1) the impact of the quality information the pre-auction competition provides and 2) the impact of using the Internet as a platform to conduct these auctions. Because this thesis is concerned with the impact of Internet marketing on rural development, it is easy to disregard the role that the non-Internet aspect of the strategy (the quality competition) plays in generating the price premium farmers experience at the auction. However, it is important to remember that the competition is a part of the overall Internet marketing strategy and, therefore, its impact on auction prices should not be ignored.

1. Impact of factors unrelated to COAs on auction premiums

Before discussing the factors that contributed to the auctions' significant premiums, it is important to examine the factors that caused several auctions to earn uncharacteristically high or low average premiums. Doing so improves the reliability of the discussion that follows because it minimizes the chance of accrediting the quality competition and/or Internet auction with COA premiums when, in fact, they were caused by variables unrelated to these components. First, although average CoE premiums rose slightly between 2005 and 2008 and average Q premiums decreased, average SCAA premiums not only rose during this period, they reached averages unseen in other auctions and then dropped dramatically. This fluctuation suggests that these auctions should be examined to determine what accounted for their extreme success as well as their inability to maintain these premiums. Because this examination reveals that the presence of one specific coffee in an SCAA auction, a factor clearly unrelated to the auction mechanism itself, was responsible for such high average premiums, the explanation for the premium found at these auctions should not be included in the discussion outlining the factors that enable COAs to generate above-market prices.

The rapid increase and decrease seen in SCAA auction averages is credited to the availability of one Panamanian coffee known as Esmeralda Especial in Panama's Best of Panama SCAA auctions. It is reasonable to make this correlation because only Panama organized SCAA auctions during this period, and the surprisingly high premiums earned were present only at the auctions where this coffee was available and the years that it was auctioned. In 2005, the average premium at the Best of Panama was 291%; however, between 2005 and 2007 when Esmeralda Especial was present in the auctions, the

average premium rose from 291% in 2005, to 569%, to 809% over the traditional market price. Esmeralda Especial earned the auction's highest premium each year and comparing the price premium paid for this coffee with that paid for other coffees justifies crediting these exceptional averages to the availability of Esmeralda Especial; Esmeralda Especial's premiums topped the list at 1,930% in 2005, 5,676% in 2006, and 12,645% in 2007 whereas the next highest premiums were 728%, 1,532% and 1,056% and the lowest premiums were 51%, 72% and 91% (results of my analysis). Based on these figures, it is clear that Esmeralda Especial's premiums were not representative of overall auction premiums and, as a result, distorted the auctions' overall average.

In addition, the farm that cultivates Esmeralda Especial coffee, Hacienda Esmeralda, decided not to participate in the 2008 Best of Panama and, instead, organized its own private online auction in 2008 where it auctioned this coffee. During this year, the average premium at the Best of Panama, which did not auction Esmeralda Especial, dropped from 12,645% in 2007 to 504% while the average premium at the farm's COA, where this coffee was available, was 1139% (results of my analysis; Willoughby's Coffees and Teas). This evidence suggests that the absence of this coffee in Panama's 2008 SCAA auction is also responsible for the plunge in the auction's average premium that year.

This observation is further explained by recognizing that the extraordinary auction premiums at Best of Panama auctions are closely related to the quality and scarcity of Esmeralda Especial. This coffee was in "high demand" amongst specialty coffee buyers because many considered it the "best specialty coffee in the world," a claim substantiated by its first place finishes in a variety of prestigious cupping competitions, including "a

string of Best of Panama [auctions], ... the SCAA's Cupping Pavilion [between 2005 and 2007], and the Rainforest Alliance Cupping for Quality in 2004, 2006, 2007" (Meisner, *Puget Sound Business Journal*; Willoughby's Coffees and Teas). Demand for this exceptional coffee was also driven by its scarcity because, on the traditional market, it was only sold in small quantities, thus making it "difficult to come by" (Meisner, *Puget Sound Business Journal*). The opportunity to purchase such an exclusive coffee created significant competition amongst bidders, and the extraordinary premium this demand generated played an important role in distorting the average premium calculated at each SCAA auction between 2006 and 2007 (Meisner, *Puget Sound Business Journal*).⁵ Therefore, because the factor contributing to the uncharacteristic average premiums documented in SCAA auctions as well as the drastic fluctuation in these premiums is not related to the competition or auction mechanism themselves, it is important to focus on the lower, more representative premiums that were earned at Best of Panama auctions when discussing the general effectiveness of COAs.

It is also important to understand the variables contributing to the low premiums earned at Q auctions as well as why the auction program was terminated in 2006 in order to eliminate the chance of accrediting the consistently high premiums earned in CoE and SCAA auctions to factors that also contributed to low premiums in Q auctions. First, David Roche, Technical Director at the Coffee Quality Institute which organized the Q auction program, explains that the goal of the Q system, which includes Q auctions, had been to "develop a standardized method to evaluate quality coffee to differentiate it from

⁵ There are no other SCAA auctions with which to compare the highest premium earned at the Best of Panama auctions but the highest premium earned at the CoE was, on average, 1,000%-2,000% over the traditional market price. Based on this comparison, it is clear that Esmeralda Especial's premiums distorted the auctions' overall average premium.

the commodity market,” and CQI incorporated Q auctions into the Q system at the request of USAID’s as a way to respond to the coffee crisis (David Roche, email communication). However, the auctions did not meet the goal the Q system was designed to achieve, and this miss-matched mission contributed to the difficulties the auction program encountered (David Roche, email communication). Roche also says that the auctions failed because “buyers of container-sized lots [were] not tuned in to an auction system,” “time differences worldwide were awkward,” and “boutique auctions such as Cup of Excellence and others created confusion with what we were trying to accomplish” (David Roche, email communication). Acknowledging these variables is crucial for ensuring the reliability of the explanation below that discusses why COAs generate above-market prices because it prevents attributing these premiums to factors that have also led to low premiums in other auctions and, eventually, the termination of an auction program.

2. Impact of the quality competition on auction premiums

Although the Internet is not utilized in the cupping competition, it is important to remember that it is a part of the overall Internet marketing strategy and, as this section explains, makes a critical contribution to the premiums witnessed at auctions because it produces the quality information buyers use to decide the auction price they believe coffee lots are worth. To illustrate the importance of this contribution, this section examines the role that quality information plays in augmenting the price premium specialty coffee generally earns over the commodity market price. It further illustrates

that this information also enables farmers to retain a higher percentage of the auction price earned.

First, the price premiums earned at COAs are partially created by the way that the quality information COAs provide about participating coffees impacts the vertical integration of coffee's global value chain (GVC).⁶ Because the specialty coffee market has emerged in response to growing consumer demand for coffee "quality, differentiation, and value-added... characteristics," coffee procurement in this market is "characterized by an intense search for high quality coffee [and] careful evaluation of coffee attributes" (Donnet et al. 2007b, 2, 6). The additional value a coffee receives in the specialty coffee value chain is based on its quality and the desirability of its taste and sensory characteristics; consequently, the ability of producers and buyers to exchange such information plays a central role in setting the coffee's final price. It is typically "the degree of vertical integration in the value chain" that determines the quantity of information that is available to buyers but unfortunately the specialty coffee value chain is characterized by fragmentation and, as a result, is poorly integrated (Daviron and Ponte 2005, 131). This has important implications for the price specialty producers earn when selling their coffee through traditional means because "the more fragmented the [value] chain, the more difficult the flow of quality information is" and the less representative the price is of the coffee's true value (Donnet et al. 2007b, 7; Daviron and Ponte 2005, 131).⁷ Improving vertical supply chain integration between producers and buyers reduces these "information asymmetries," thereby enabling the price to better reflect the coffee's actual

⁶ The GVC is a method used to "analyze general features in the movement of [commodities] from production to consumption" (Daviron and Ponte 2005, xxiv).

⁷ As cited in Lingle, Ted, 15 November 2001. "What a Difference a Decade Makes." From <http://espresso101.com/newsletter/422>.

value, because it makes it possible for producers to share quality information with buyers before the coffee is purchased (Ponte 2002, 4).

COAs offer a way to tighten linkages in the value chain by providing quality information to buyers prior to the auction. Both small volume (CoE and SCAA) and large volume (Q) auctions evaluate the quality of each coffee before the auction and make this quality rating as well as the sensory description of the coffee accessible to buyers before the bidding begins (Donnet et al. 2007b, 4). However, buyers participating in large volume auctions receive less quality information about the coffees in the auction than buyers participating in small volume auctions because “the uniqueness of a particular production location and... coffee variety can be lost” in the process of combining lots to meet the lot size requirements inherent to large volume auctions (Donnet et al. 2007b, 4). Hedonic analysis of CoE and Q auction prices in Donnet et al. (2007b) proves that the difference in the amount of quality information provided to buyers prior to the auction does add value to the coffee and impact the final price offered at auction. This analysis finds that the “impact of quality rating [on price] is almost four times larger in the CoE versus the Q” and that the influence of this quality rating is statistically significant in determining the amount of value added in auctions (12). Therefore, in light of the notable difference between prices at CoE and Q auction, this analysis highlights that quality ratings play an important role in adding value to coffee and contribute to the above-market prices earned at auction (Donnet et al. 2007b, 11, 14). Ponte (2002) helps explain this finding by claiming that this information reduces the risks buyers incur when bidding for a product whose “intrinsic characteristics... can only be

assessed after roasting, grinding, and brewing” and that may not satisfy expectations upon brewing (Ponte 2002, 4).

The extended price analysis conducted in this thesis complements Donnet et al.’s (2007b) finding that COA prices are contingent on the amount of quality information they make available to roasters. When comparing the premiums earned at CoE and SCAA auctions, which reveal a “greater amount of information about the values associated with coffee ratings [and] rankings” to buyers prior to the auction, with the premiums earned at Q auctions where “information on quality is more limited,” it is clear that both auction programs generated significantly higher premiums than Q auctions (Donnet et al. 2007b, 14). My analysis reveals that during the three years that Q auctions were organized, CoE auctions produced average premiums 565%, 380%, and 377% higher than those at Q auctions while SCAA auction premiums surpassed Q premiums by 303%, 115%, and 495%. This comparison highlights that each auction’s price premium paralleled the amount of quality information communicated to buyers prior to the auction, which suggests that this information has continued to drive how prices are determined. Therefore, my analysis not only substantiates Donnet et al.’s (2007b) hedonic analysis of the central role this information plays in price formation, it also underlines the importance of the quality competition to the prices the Internet component of this marketing strategy generates.

The price premium earned at the post-competition auction also reflects the influence of this quality information on transaction costs for buyers in terms of search costs and time investment (Daviron and Ponte 2005, 157; Banker and Mitra 2005, 100; Li 2003, 163). The search costs involved with physical coffee procurement methods are

generally high because roasters incur significant time and travel expenses in their search for coffee that meets specific quality standards and that exhibits particular taste characteristics (Donnet et al. 2007a, 8; Banker and Mitra 2005, 100). However, COAs “offer the possibility of finding high quality at low search cost” because, as discussed above, they instantly link buyers with quality information (Donnet et al. 2007a, 9; Daviron and Ponte 2005, 157). Buyers can quickly narrow their search to the small pool of coffees participating in the COA and then, from this selection, determine which coffee lots to bid on based on which lots meet their desired quality standards and taste profile. Drawing on the above evidence indicating that price premiums are related to the amount of quality information a COA provides, it is reasonable to suggest that the premium bidders are willing to pay during the auction also reflects the degree to which a COA reduces transaction costs for auction participants by providing this information. Therefore, because of the positive impact that the quality information COAs provide has on value chain integration and transaction costs for buyers, it is reasonable to assert that the competition portion of COAs is largely responsible for the consistent premiums farmers earn at the online auction.

3. Impact of online auction on price premium

Although the competition stage of a COA plays a large role in determining prices at the subsequent online auction, it is also necessary to consider how the auction’s Internet format impacts the price earned. First, the Internet auction is central to the COA’s ability to integrate the value chain in such a way that it draws above-market prices. It allows participants to “bypass the existing distribution system and create a

closer link between growers and roasters” (Scholer 2002, 122). The ability to form these relationships lead to a more tightly integrated value chain, which, as discussed above, leads to prices that more accurately reflect the coffees’ true, higher value. The auction also ensures that this integration occurs by guaranteeing that the quality information the competition provides is utilized and not shelved for future use because those who receive the information use it to determine the price they believe the coffees are worth, which influences the price they are willing to bid.

Using an online platform to conduct the auction also ensures that farmers actually receive the value the quality competition adds to their coffee. First, conducting the auction through the Internet makes collusion among bidders more difficult and, therefore, reduces their ability to control the final auction price by rotating bids or making bidding alliances (Banker and Mitra 2005, 101).⁸ Although collusion in physical auctions for other agricultural products, including Indian and African coffees, is a “widely recognized phenomenon,” the online format of the auction reduces the risk that collusive behavior will drive down prices because buyers cannot see the lots being auctioned or the other bidders (Banker and Mitra 2005, 98, 101). This characteristic helps ensure that auction prices include the added value the coffees are worth although further research is needed to determine the extent to which it contributes to premiums.

Using the Internet as a platform for the auction also influences the amount of the final value-added price the farmers receive. This characteristic is important because the fact that COAs generate a price premium is insignificant unless farmers receive a percentage of the value added earnings through the COA that is greater than what they

⁸ As cited in Banerji, A., and Meenakshi, J. V., 2004. “Buyer Collusion and Efficiency of Government Intervention in Wheat Markets in Northern India: An Asymmetric Structural Auctions Analysis,” *American Journal of Agricultural Economics* 86 (1): 236-253.

would receive through traditional methods. Using the Internet auction as a procurement method helps ensure that a greater percentage of the price premium is allotted to the farmer by “reduc[ing] the use of intermediaries” and eliminating the fees associated with these services (Li 2003, 163; Banker and Mitra 2005, 98). The online bidding system enables producers and roasters to engage in transactions without involving agents, brokers, or traders and, as a result, producers receive a larger percentage of the final sale price. Based on auction rules, producers participating in the CoE receive 80% of the final price, with the remainder covering the cost of transportation and exporting and importing fees, while Q auction participants also receive approximately 75% of the “gross sales” (Donnet et al. 2007c, 15; Daviron and Ponte 2005, 157). Therefore, it is clear that the Internet auction makes important contributions to the premiums documented at COAs yet further research is needed to better understand its role in price formation.

Conclusion

The above price analysis clearly illustrates that COAs are an Internet marketing strategy that enable farmers who qualify to participate in the auction to receive an above-market price for a small lot of their harvest. Several factors contributed to the formation of these premiums, including factors unrelated to the COA mechanism itself; however, based on the above discussion, it is also clear that both components of COAs also play an integral role in creating such premiums. This is directly due to the fact that this Internet marketing strategy is not merely a cupping competition or an Internet auction but both, and both components are necessary for the strategy to provide farmers with an opportunity to earn a premium price. Both the quality competition and the Internet

auction work together to ensure that the prices farmer's receive better reflect their coffees' value. The competition enables bidders to offer a price equal to the coffee's true value by producing the quality information needed to make this assessment and providing it to bidders while the Internet auction ensures that farmers benefit from the value-added prices this quality information stimulates. It does so by preventing roasters from simply using the event as a means to easily acquire information about a selection of coffees and storing it away for future use as well as reducing the risk that collusion prevents farmers from receiving this value-added price and enabling farmers to retain a greater portion of the final earnings. Therefore, both components of this marketing tool are crucial if it is to enable farmers to earn above-market prices. In the next chapter I will continue to investigate how COAs impact agricultural growth by focusing on whether they stimulate long-term, above-market prices.

Chapter V: A strategy to earn long-term, above-market prices?

Hypothesis 2: COAs are an Internet marketing tool through which farmers can indirectly earn a higher, long-term price for their product.

Long-term prices and sustainable growth

I continue to examine whether Internet marketing contributes to economic development efforts by impacting the price producers earn for their product by evaluating whether it enables farmers to earn long-term, above-market prices (see hypothesis 2 above). Testing this hypothesis is important because it provides insight into whether COAs promote short or long-term agricultural growth. Although the price analysis in the previous section supports the claim that COAs, as a form of Internet marketing,

contribute to agricultural growth by stimulating a one-time above-market price for participating coffees, CoE and SCAA auctions only auction very small lots of coffee, and the large lots sold in Q auctions were often composed of small lots from several farms who received only a share of the small premium earned in this auction. Therefore, unless participating farms only produce a very small harvest and sold their entire harvest at the auction, it is likely that they only receive/d this price premium for the sample of their crop sold at auction. Especially in the case of first and second place finishers whose price premiums were, on average, 1,000-3,000% above market price, it is unrealistic to expect future buyers to match such high premiums when purchasing high volume lots or negotiating long-term price contracts. Therefore, this analysis does not guarantee that farmers who participated in auctions received the true value the remainder of their non-auction crop was worth. Furthermore, because farmers often do not receive the above-market price their coffee is worth due to poor vertical integration in the supply chain (see discussion in Chapter 3), there is no guarantee that they will be able to sustain this price when selling future harvests of equal or superior quality.⁹

Explanation of interview method

Because many auction prices are unsustainable, some industry experts suggest that COAs are not a long-term price-discovery strategy, and producers should not expect to continue earning such above-market prices for their crop after the auction. Instead, they should realize that COAs function as part of a strategy to “tackle the [specialty coffee] supply crisis” by providing growers with financial incentives to produce quality

⁹ Daviron and Ponte’s (2005) discussion of Tanzanian Kilimanjaro peaberry provides empirical evidence that there is no guarantee that higher quality will be rewarded with a higher price at the producer level (217-218).

coffee as well as to serve as a marketing tool for farmers (Daviron and Ponte 2005, 155, 158).¹⁰ To investigate these claims, I conducted open-ended interviews with four Guatemalan coffee farmers who have participated in both types of COA programs being evaluated, the CoE and the SCAA. The interview questions included in the questionnaire were open-ended and conducted via email, and questions addressed how auction participation influenced the long-term prices farmers earned for their product, their ability to engage in new market opportunities, and how profits from these auctions impacted living conditions on their coffee farm (see appendix 2 for a copy of the questionnaire).

Three Q auctions were organized in Guatemala between 2004 and 2005 yet I did not conduct interviews with farmers that participated in these auctions for several reasons. First, in Q auctions, producers combined their lots and the collective lot was sold under the name of one farm, making it difficult to obtain information regarding individual producers. Furthermore, the CQI admits that Q auctions were not designed to serve as a marketing mechanism, enhance relationships between producers and buyers, or improve living conditions on participating farms as they were/are with the EC and the CoE (Evans 2003, 4; David Roche, email communication; Cup of Excellence; Blanca Castro, email communication). Drawing conclusion based on responses from farmers participating in an auction program that was not trying to achieve these goals would decrease the validity of my findings.

I chose to focus this portion of the study on competitive-online auctions specifically in Guatemala for several reasons. First, Guatemala, as the first Central

¹⁰ The supply of specialty coffee is in jeopardy because farmers are not always paid higher prices for quality coffee and have no guarantee that the extra costs they invest to produce high quality coffee will be “awarded with higher prices at the producer level” (Daviron and Ponte 2005, 156, 161).

American country to organize competitive-online specialty coffee auctions, has the region's longest history of holding such auctions. This fact is important because building relationships with buyers, improving marketing, and making investments in the farm take time and, to draw reliable conclusions from interview responses, it is essential that farms have had sufficient time to engage in the above activities if they chose to do so.

Guatemala has also held both CoE and SCAA auctions, and it is important to be able to interview farmers who had participated in both auction programs in order to avoid drawing general conclusions about COAs that may not hold true for both auctions.

I interviewed four Guatemalan farmers for this study, and all respondents had participated in the both the CoE and the Exceptional Cup (EC), Guatemala's SCAA auction. The EC was a COA organized in 2004 and 2005 by ANACAFE, Guatemala's national coffee association, using the SCAA auction platform. It was organized in place of the Guatemalan CoE during these years and, for the purpose of comparing COA programs, it represents an alternative to the CoE. Several farms that participated in the CoE also participated in the EC because it was the only auction in which they could participate during 2004 and 2005. As a result, all farms I interviewed were able to compare their experience in both auction programs and make observations that suggest whether the COA format, in general, promotes greater market opportunities and improvements in living conditions or whether these changes are related to certain factors found only in one specific auction program.

In addition to satisfying this requirement, the farms I interviewed had also participated in at least three competition-auctions. Choosing farms that satisfy this criterion strengthens the reliability of my conclusions because they are not skewed by

responses from farmers who participated in the competition-auction process only once. This criterion also ensures that farmers have had at least three years to engage in new business negotiations and make investments in poverty reduction initiatives if their participation in COAs enabled them to do so. The farm's auction ranking and location were not considered when selecting interviewees to ensure that responses were not biased towards those farms that received the highest premium. While this selection criteria limited the number of farmers qualified to answer the interview questionnaire to seven, including these controls was important to guarantee the reliability of responses. I repeatedly contacted all seven farms requesting their cooperation, and four responded and agreed to participate. Although this small sample size also prevents me from drawing generalizable conclusions about COAs based on numbers, their open-ended responses do provide useful insight into why COAs do or do not achieve these development objectives while also generating avenues for further research.

Summary of interview responses

Farmers' responses reveal that, under certain conditions, competitive-online auctions *do* contribute to the sustained, above-market prices farmers earn for their non-auction crop and/or future harvests, thus supporting hypothesis 2. However, several responses suggest that this advantage is not an inherent outcome of COA participation and that other factors must first be present for auctions to facilitate this development goal.

1. Impact of CoE participation on long-term prices

All farmers responded that their participation in the CoE had led them to enter into higher paying contracts after the auction who prices reflect their coffee's true value,

and that these prices have been sustained and, in one case, increased. One farmer mentioned that he had been “able to have direct contact” with several bidders that participated in the auction, and mentions specifically that one of these bidders continues to pay “a prorated price 30% higher than the average price at which [they] sold the remainder of the harvest [after the CoE].” This farmer further noted that, despite the higher costs associated with selling directly to the bidder, “the prorated net income was still over 25% higher than [that received for] the remainder of the crop,” thus confirming that his participation in the CoE led him to negotiate a long-term, higher-paying contract for a portion of his crop. A second farmer responded that “before CoE... we were being paid \$0.65/lb for our non-CoE coffee. After the first year of CoE we were paid \$1.15 and now we are at \$2.10 and \$4.85.” Even after acknowledging that traditional market prices also rose during this time, the prices this farmer mentions are still significantly above market prices.

Another farmer reiterated these responses by implying that his participation in the auctions has helped his farm earn higher long-term prices because it has allowed him to enter “the best and most demanding markets” where prices are higher due to the added value associated with higher quality. He also spoke specifically about how his participation in the auction impacted the price he earned for the “rest of the coffee of the same variety that was auctioned” and claims that participating in this auction “helped them to improve the price” received for this coffee following the auction. Together these responses, although they represent a small sample of auction participants, support the hypothesis that auctions are a strategy through which farmers can earn a prolonged,

above-market price for their coffee that more accurately reflects the added value its higher quality yields.

2. Impact of the EC participation on long-term prices

Farmers do directly credit their participation in the EC with their ability to negotiate several high-paying long-term contracts. However, unlike farmers' unanimous, positive impression when asked how participating in the CoE impacted the future prices they earned, their responses were less enthusiastic and suggest that there was a difference between the extent to which each COA contributed to this outcome. One farmer suggested that, although his participation in the EC played a role in enabling him to engage in such contracts, the benefit of this auction for farmers was branding and not the post-auction prices they earned for their crop. He also said that "for those who followed up with bidders as [he] did, particularly the top bidders, it was, in the long run, [worth it], but not in the moment." This response implies that although he was able to negotiate higher prices for his crop through the contacts he made at the auction, he was only able to secure these prices because he, himself, took the initiative to contact bidders. A second farmer was reservedly positive about his farm's experience and explained that, specifically regarding the remainder of his non-CoE crop, he was able "to sell the rest of the coffee at better prices, not how [he] wanted but, yes, the price increased." Two farmers did not comment on whether they the auction was associated with their ability to earn long-term prices following the auction. Overall, the above responses indicate that the EC did prompt some farmers to earn a higher, long-term price although not to the extent experienced following the CoE.

Factors influencing post-auction prices

Two factors explain why farmers experienced new higher paying, long-term price contracts after the COAs. First, based on responses farmers gave to supplement their comments on prices, it is clear that the farmers were able to successfully negotiate such contracts because of the auction's ability to identify and connect a group of producers and buyers who meet each other's needs. After the auction, farmers were able to contact bidders and vice-versa to discuss contracts that paid farmers the true value for their coffee. However, it is crucial to acknowledge that the amount of initiative COA participants took to contact these bidders directly influenced whether they arranged long-term, above-market prices following the auction and this observation suggests that these opportunities are not a natural outcome of auction participation. The degree to which auction organizers actively encourage producers and bidders to pursue relationships with each other following the auction also plays an important role in determining whether COAs improve participating farmers' ability to earn prolonged above-market prices for their crop. One respondent emphasizes the importance of this factor by directly attributing his ability to enter above-market contracts after the CoE to recent efforts the CoE program has taken to improve "relationships between producers and buyers." Therefore, because the degree to which hypothesis 2 is true depends on the presence of these two factors, economic development strategies seeking to help farmers earn long-term, above-market prices should not assume that COAs will achieve this goal.

Conclusion

The above interview responses support the hypothesis that COAs are an Internet marketing tool that contributes to long-term agricultural growth by enabling producers to earn long-term, above-market prices. Although COAs, themselves, do not directly generate such prices, they positively influence the price discovery process by connecting producers with future buyers and, by doing so, provide a foundation from which both parties can pursue long-term, value-added contracts. However, interview comments point out that COA's ability to facilitate these activities is contingent on several conditions beyond their control: 1) the extent to which auction organizers encourage relationships between producers and buyers willing to pay above-market prices and 2) the amount of initiative producers take to contact buyers willing to pay long-term price premiums after the auction. This second condition suggests that there is a linkage between the degree to which COAs facilitate long-term prices and their impact on a farmer's ability to access new market opportunities. In sum, these responses provide preliminary evidence that COAs impact long-term, rural economic development by indirectly contributing to one factor associated with sustainable agricultural growth, the ability to increase the long-term commodity price producers earn.

In the next chapter, I will examine the impact of the CoE and the EC on a second variable that is important for achieving rural economic growth, commodity farmers' ability to enter new markets for their coffee and expand their market opportunities by engaging in relationships with new buyers.

Chapter VI: A strategy to improve market access and participation?

Hypothesis 3: COAs are an Internet marketing tool that enables farmers who participate in the final auction to access new market opportunities by entering new markets and establishing relationships with new buyers.

Upgrading to improve market access and participation

This section uses interview responses to examine whether COAs influence economic growth by improving the ability of those farmers who participate to enter new markets and engage in new contracts in those markets (see hypothesis 3). As discussed in the thesis' introduction, scholars overwhelmingly agree that improving market access for commodity producers, especially into markets offering higher prices, is crucial for stimulating agricultural growth and reducing poverty because it enhances farmers' competitiveness, increase productivity, generates higher incomes, and creates jobs. In light of the growing emphasis on market access, it is becoming increasingly popular in the literature to encourage farmers looking to improve their market opportunities to “upgrade”¹¹ into high-value markets (also known as niche markets), such as the markets for organic vegetables and specialty coffee, where they can take advantage of the higher price associated with higher value products; participating in the specialty coffee market has the added benefit of enabling farmers to exploit the trend for buyers to establish direct relationships with farmers (Daviron and Ponte 2005, 30, 156;¹² IBRD 2004, 89; Varangis et al. 2003, 13; IFAP 2004, 6; Killick 2001, 159; Donnet et al. 2007, 6; Byerlee and de Janvry 2008, 12). This type of business relationship is often called “relationship-coffee” and refers to a method of sourcing coffee through which buyers establish a direct

¹¹ Upgrading is defined as “the process of... accessing new market segments through participating in particular chains” (Daviron and Ponte 2005, 29). As cited in Humphrey J, 2003. “Upgrading in Global Value Chains,” background paper for the Commission of the Social Dimensions of Globalization, Brighton: IDS-Sussex.

¹² As cited in Gibbon, P, 2001. “Upgrading Primary Production: A Global Commodity Chain Approach,” *World Development* 29(2): 345-363.

relationship between the buyer and the farmer rather than sourcing the coffee through a number of intermediaries (Daviron and Ponte 2005, 156). This type of contract is becoming increasingly common in the specialty coffee industry because it allows buyers to appeal to the growing number of consumers interested in coffees from certain origins by including a story about the specific farm producing the coffee (Daviron and Ponte 2005, 156). Therefore, by upgrading to the specialty market, farmers can benefit from the new opportunities this marketing strategy offers for farmers to enter into contracts with buyers looking for coffees from their region or with their specific taste profile.

The coffee industry has become a strong proponent of upgrading because the premiums available in niche markets have the potential to help farmers, especially those in Central America, to overcome the slow growth and poor living conditions caused by the recent coffee crisis (Varangis et al. 2003, 13, 14; IBRD 2004, 89). Several niche markets have emerged in the coffee industry including the specialty, fair trade, organic and sustainable markets, and evidence indicates that there is a good potential for Central American farmers to access these markets (Ponte 2002, 1; Varangis et al. 2003, 13; Daviron and Ponte 2005, 155). In light of this thesis' focus on Guatemala, it should be noted that Guatemalan coffees traditionally earn among the highest premiums in these markets when compared to other countries in the region and, although Guatemala's exports to niche markets already account for a substantial portion of its coffee exports, it has the potential to export significantly more (Varangis et al. 2003, 13, 14).

COAs are one strategy recommended to help farmers expand into such niche markets, specifically the specialty market, and establish market relationships with new buyers because they were designed to "identify and promote the best coffees (within a

given country)” (Varangis et al. 2003, 29; Daviron and Ponte 2005, 158; Donnet et al. 2007b, 4, 14). Scholars and organizations hosting COAs base this claim on two factors. First, they emphasize that these auctions are a marketing tool through which participating farmers can engage in new business relationships in this market by attracting the attention of specialty coffee buyers after the auction. Because COAs are well-known for the quality requirements coffees must meet to qualify for this event, these proponents claim that farmers can capitalize on the reputation associated with auctioned coffees to entice buyers searching for only the highest quality product. Furthermore, industry experts stress that “boutique auctions [like the CoE and EC] tend to stimulate buyers’ interests in coffees featuring similar attributes, leading to additional purchases and higher prices outside of a particular e-auction market” (Donnet et al. 2007b, 4).¹³

COAs are also identified as a tool for increasing farmers’ access to more a more lucrative market as well as their participation in these markets because of their impact on farmers’ visibility in the specialty coffee market. The auctions’ international nature is credited with leading producers into new contracts after the auction because it enhances the visibility and name recognition of all participating farms (Daviron and Ponte 2005, 157). Gaining recognition through COAs is especially important for small, lesser-known producers, primarily those from “coffee regions and origins that were not necessarily known as ‘specialty,’” because it provides them an opportunity to make themselves visible in this market (Daviron and Ponte 2005, 157, 158; Donnet et al. 2007b, 3).

Allegedly, these new market opportunities can arise both during the competition-auction process and afterwards. Through the auction itself, farmers may forge a new

¹³ As cited in Ganes-Chase, Judith, 2006. State of the Industry Report: Global Supply and Demand Outlook. Charlotte, Specialty Coffee Association of America.

long-term relationship with the buyer who has just placed the winning bid on their coffee. After the auction, new market opportunities may emerge in three ways. The first instance involves producers who, after participating in the auction, enter the specialty market for the first time. This occurs when farmers who are unsure whether their coffee is qualified to compete in the specialty market enter the quality competition, learn that they do produce high quality coffee upon qualifying for the auction, and, as a result, begin selling their coffee in the specialty market following the auction. In fact, this was the case for two of the farmers that I interviewed. The second scenario involves buyers who approach farmers to purchase coffees that were available at the auction. Bidding wars over certain coffees may stimulate post-auction demand for these coffees as well. Finally, it is common for farmers to approach auction bidders and pursue a contract with them. The interview responses summarized below offer initial evidence that COAs *have* prompted greater market opportunities for farmers by triggering each of the above scenarios.

Summary of interview responses

Farmers' responses to questions regarding the impact of the CoE and the EC on their ability to enter new markets and engage in contracts with new buyers support my hypothesis that COAs are a strategy through which farmers can enter a new market and expand their business opportunities in this market. It was clear from their responses, however, that farmers who participated in the CoE were more successful in forging connections with new buyers than those participating in the EC, and their comments suggest that the degree to which farmers experience these post-auction market

opportunities is influenced by three factors: 1) the efforts the auction's sponsoring organization takes to connect buyers and producers, 2) the amount of initiative producers take to pursue buyers after the auction, and 3) the impact of recognition the farm receives through other sources following the auction.

1. Impact of the CoE on market access and participation

All four farmers responded that participating in the CoE had improved their farm's participation in the specialty coffee market and had enabled them to access a new market and/or begin new, long-term relationships in markets in which they already participated. They also agree that these experiences are primarily a result of the way that their involvement in the auction enhanced their farm's visibility in the market and their ability to use their auction participation to market their coffee. Regarding whether CoE participation enabled farmers to access new markets, one farmer noted that his participation in the auction provided him the ability to enter the "best and most demanding markets" following the auction. Several farmers also commented that involvement in the CoE enhanced his/her market participation and each directly attributed this change to the recognition the auction provided his/her farm either during or after the auction. For example, one farmer experienced "increased demand for [his coffee]" following the auction while another stated that his farm continues to maintain "constant contracts with buyers" he established a relationship with following the auction. Another farmer provided a more detailed explanation of how involvement in the CoE enhanced farmers' market participation by explaining that the auction brought his coffee to the attention of other bidders at the auction and, as a result, his farm has continued to

have “direct contact with buyers in Norway, who purchased some of [their] coffee outside of the lots of CoE.” One farmer summarizes the role the CoE played in facilitating these experiences by explaining that the CoE generated greater “recognition to the target...audience,” especially in international markets and provided a useful tool for “branding” his coffee. Overall, these responses provide clear support for hypothesis 3 and farmers’ ability to maintain these contracts over the long-term is important when discussing COAs contribution to sustainable agricultural growth.

2. Impact of the EC on market access and participation

All farmers also replied that the EC served as a platform through which they were able to improve their participation in the specialty coffee market, and it enabled one farmer to access this market for the first time. They also credit these opportunities to the recognition the auction provided their coffees. For example, one farmer directly credited his participation in the auction with “attract[ing] new buyers” interested in his coffee while another felt that the EC, in general, was “positive for branding.” He also noted that his farm gained “some exposure” in the market although it was not the amount of exposure he was expecting and mentions that he was able to expand his participation in the market by negotiating new contracts with bidders he followed up with after the auction. Together his responses suggest that the EC influenced the way farmers accessed the market in at least two ways: by allowing farmers to pursue buyers and for buyers to approach them. Farmers’ responses also suggest that these they were able to maintain these contracts over the long-term, and one respondent specifically commented that his farm had engaged in “constant contracts” following the EC. These responses also

support hypothesis 3 and provide evidence in favor of COAs' role in stimulating sustainable agricultural growth.

Factors influencing post-auction market access and participation

Although farmers' responses support the hypothesis that COAs enable farmers to expand their market access, several comments also suggest that it is important to recognize that a farmer's ability to engage in new market opportunities following the auction may be influenced by three factors unrelated to the auction. First, the degree to which the organization hosting the auction is involved in generating relationships between producers and buyers may influence the degree to which farmers are able to utilize the networking resources made available through the auction. Since 2006, ACE, the organization sponsoring the CoE, has increased its efforts to "improve [the] relationship between buyers and farmers" and, according to one farmer, this intervention accounted for the difference benefits he experienced as a result of both auctions. Therefore, when evaluating the impact of COAs on market opportunities one should keep in mind that outside intervention may also play an important role in facilitating these interactions.

The initiative a farmer takes to pursue new contracts with auction bidders also influences his/her success in using business contacts made through COAs to engage in new market opportunities. Again, one farmer's response illustrates the importance of this factor. He notes that some EC participants, including himself, did not earn a high enough premium to make a profit from the auction, but that, in the long run, the experience was "worth it" for those farmers who "followed up with bidders," particularly top bidders.

This comment suggests that farmers cannot assume that the recognition the auction provides will attract buyers' interest in their coffee; they have to be proactive and take advantage of the group of potential buyers the auction identifies as well.

Finally, non-auction sources of recognition, such as media attention and other cupping competitions, may also contribute to the new relationships farmers engage in after participating in COAs. One farmer noted that the articles in magazines and newspapers that were published about the awards his farm received at the CoE also "helped to promote the farm's name." Therefore, it is also important to remember that the auction is not the only means by which a farm's name becomes recognized in international markets, and its ability to benefit from media attention may also explain its ability to participate in the market.

Conclusion

Farmers' responses provide evidence and explanations for the hypothesis that COAs are a tool through which farmers can improve their access to and participation in markets. Based on these responses, it is clear that COAs play a direct and indirect role in prompting market access, especially into the niche markets that scholars emphasize offer significant opportunities for commodity producers to engage in agricultural growth activities. COAs directly contribute to market access because the quality competition provides farmers with immediate entry into the international specialty coffee market, and the bidding process that takes place at the Internet auction may create a new market opportunity by initiating a relationship with new buyers. The awards and extraordinary prices farmers earn at the competition and auction also directly enhance the farm's

visibility in the market by improving its name recognition, and COAs' reputation in the industry as a discovery tool for quality coffee confirms the level of quality buyers can expect when purchasing coffee from participating farmers.

Responses also highlighted that COAs indirectly influence farmers' market involvement by contributing to the creation of these opportunities. First, association with COAs aids farmers in their search for new market opportunities by either attracting quality-conscious buyers to their coffee or allowing farmers to use their COA participation to market their product and pursue new contracts themselves. The auction itself also serves as a networking resource by identifying quality producers and introducing them to a list of bidders with whom they can pursue new, long-term contracts after the auction. Finally, the awards and prices farmers earn are also published throughout industry magazines, news articles, and journals, and the attention farmers receive due to this media exposure also enhances their visibility and name recognition. Therefore, COAs directly influence farmers' market access and market participation while also indirectly providing a jumping off point from which farmers can engage in new market opportunities.

I will now examine whether the way farmers spend profits earned from COAs have allowed this event to indirectly improve human development in farming communities. These findings and those of the previous two sections will then be analyzed to assess the larger linkage between agricultural growth and poverty reduction.

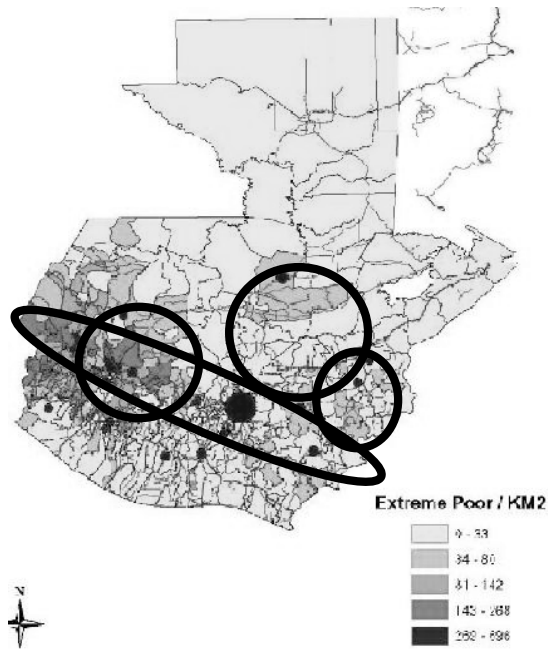
Chapter VII: A strategy to improve local living conditions?

Hypothesis 4: COAs are an Internet marketing tool through which farmers can improve living conditions on their farms or farming communities.

Reducing poverty in coffee growing regions

Whereas the previous chapters have investigated how competitive-online auctions contribute to economic development, this section addresses how they affect human development. Coffee communities deserve the attention of studies investigating alternative human development strategies due to the poverty characterizing Guatemala's coffee producing regions and the devastating impact of the recent coffee crisis on poverty reduction efforts in Guatemala. In Guatemala, like much of Latin America, rural areas are overwhelmingly impoverished: 81% of Guatemalans subsiding in rural regions live in poverty, 93% live in extreme poverty, and 87% of these residents depend on agriculture for subsistence or work (IBRD 2004, 33, 85). Because of their rural nature, coffee communities are no exception and the overlay map in Figure 1 illustrates that Guatemala's extremely impoverished areas are highly concentrated in coffee growing regions.

Fig 2. The distribution of extreme poverty density in Guatemala in relation to Guatemala's primary coffee growing regions.



Source: Map is from “LCR Working Paper 21,” 2005 (original data from Drivers of Growth team using data from MAGA-SIG and the Population Census, 2002); Classification of coffee regions is from *ANACAFE Coffee Atlas 2007/2008*.

Note: Circled areas indicate coffee growing regions.

Several strategies have been designed to improve living conditions in agricultural communities, and Guatemalan COAs consider themselves part of the country’s overall mission to address human development issues by reducing poverty on the farms that participate in the auctions (Varangis et al. 2003, IBRD 2004, de Ferranti 2005). The price analysis in Chapter 4 verifies that auctions generate significant premiums, and both CoE and EC auction organizers contend that participating farmers use the profit associated with these premiums to improve living conditions on their farms. Through an e-mail exchange, Blanca Castro, ANACAFE’s marketing coordinator, explained that EC auctions were part of ANACAFE’s efforts to improve living conditions on coffee farms, and the CoE website asserts that “the positive impact [of auctions] on the quality of life for a winning farmer and his family is permanent as the auction money will often be spent on farm improvements or family education.”

To examine whether the price premiums this Internet marketing strategy generates allow it to indirectly improve living conditions in coffee growing regions, the second half of the interview questionnaire asked farmers to discuss how they spent the profits earned through the auction (see appendix 2 for a copy of the questionnaire). My analysis of hypothesis 4 is based entirely on how farmers responded to these questions, and these answers, together with the conclusions drawn in previous sections, are used to discuss the relationship between agricultural growth and poverty reduction. Because of the small sample size upon which this investigation is based, these results are not conclusive; however, they do provide initial insight regarding the contribution COAs make to human development that can be supplemented with further research.

Human development indicators addressed

To determine whether auction profits have contributed to improvements in human development on coffee farms, the content of interview questions was based on several indicators the literature agrees must be addressed if development is to be achieved. The Millennium Development Goals (MDGs) emphasize that progress towards development can be measured based on the prevalence of poverty and hunger, universal primary education, and health indicators such as child mortality, maternal health, and disease and that these indicators must be the focus of development strategies (Boullion 2005, x). The 2004 World Bank case study of poverty in Guatemala stresses that, in Guatemala specifically, investing in education, health care, and malnutrition will have the largest impact on poverty rates (IBRD 2004, 15, 16). Therefore, in accordance with these indicators, farmers were first asked to discuss whether investments were made to improve

nutrition, education, health care, access to electricity and potable water, and workers' wages.

Interview questions also asked farmers to describe how auction profits had been invested to allow workers to engage in non-farm activities and capacity building programs. This investment is important when discussing advances in rural development because diversifying into non-traditional agricultural production is widely recognized as an important part of rural poverty reduction strategies and, according to the 2004 World Bank study of poverty in Guatemala, non-farm employment could “provide a route out of poverty” for those employed in agriculture in rural Guatemala (IBRD 2004, 15, 92, 6). Therefore, farmers who were investing profits in non-farm activities and capacity building programs would be viewed as taking steps to reduce poverty in their farming communities. To better understand how profits were spent if they were not invested in social programs, farmers were also asked to explain any operating expenses, investments in the plantation, and/or activities related to coffee production that the profit was used to cover.

To further reveal whether COAs had contributed to changes in living conditions, I also incorporated two indicators mentioned by coffee farmers who participated in Utting-Chamorro's (2005) study regarding how Fair Trade premiums had impacted living condition on Nicaraguan coffee farms that participate in this niche market. One farmer the study interviewed observed that reduced migration from the farm to the city may indicate an improvement in stability and living conditions on the farm while another suggested that farmers may use price premiums to pay off farm debts (Utting-Chamorro 2005, 594, 589). Therefore, I also asked farmers to discuss whether migration from the

farm had decreased and if premiums had been spent to pay off debt because these variables could also suggest whether living conditions had improved and further explain where farmers were spending the premium if it was not being spent on social programs.

Summary of interview responses

Interview responses suggest that auction profits can positively impact living conditions but that the extent to which profits earned in the CoE and the EC impact human development depends on the auction being considered. Not all farmers spent EC premiums to improve living conditions while all respondents claimed to use CoE premiums for such initiatives.

1. Impact of CoE profits on human development indicators

Farmers' responses indicate that CoE profits were spent on programs that addressed the human development indicators outlined in the MDGs and the World Bank case study. Although all farms invested a portion of the profit to improve the coffee plantation, purchase equipment, or to pay production related expenses, each farm also made investments in programs associated with human development indicators, and some initiated capacity-building programs and non-farm activities.

The amount of earnings invested in social programs varied between farms and ranged from a farm that invested the majority of the profit into specific social programs to a farm whose policy is/was to invest 10% of its total annual profit, including auction profits, into "social responsibility projects;" this farm spent the majority of the profit, however, on the plantation and activities related to coffee-production. Three out of four

farms used the profits to improve primary education, and efforts included expanding a school, providing books and physical education equipment for two local schools, and starting a foundation that will “meet the needs of the local communities,” including educational needs. The farms that used CoE profits to improve health care have built medical clinics for workers or made improvements to existing health care centers, and one farm responded that it not only used part of its CoE profits to built a clinic, it also used these earnings to cover the cost of a doctor who provides free, weekly check-ups for workers, to pay to maintain an agreement with the closest hospital so that workers can receive attention at all times, and to offer courses in personal hygiene and first-aid. Three out of four respondents also claim to use CoE profits to offer workers better nutrition. On one farm, part of the profit was spent to provide more fruits and vegetables, while another farmer purchased a tortilla maker that makes 3,000 tortillas to provide workers with tortillas “all the time.” Another farmer indirectly used CoE profits to improve nutrition because, after using CoE profits to replant its coffee fields, it was able to give locals part of this land to plant corn and black beans.

Improving access to electricity, clean water, implementing capacity-building programs, and investing in non-farm activities were among the least popular uses for CoE profits. Only one farm installed electricity and improved the quality of potable water available for workers by investing in new decanters and water filters. This same farm also used profits to begin financing a variety of skill-building workshops for workers, such as computer training, coffee cupping, operating machinery, industrial security, personal hygiene, and first aid. Only one farm used CoE profits to introduce non-farm activities into the community and did so by using a percentage of these profits “to help

[farm managers] start other businesses for them be more self-sustainable.” Although interview questions did not specifically address diversification into non-agricultural production, one farmer also explained that he used CoE income to replant the cardamom fields that the farm had used to supplement its coffee exports before the fields were destroyed during Guatemala’s civil war. This profit was also used to reinvest in the large cattle ranching project the farm had in the 1980s but was forced to sell during the coffee crisis.

Farms were hesitant to use CoE profits to increase wages for employees; only one farm did so directly by using a portion of the profit to increase workers’ wages by 20%. However, another farmer stressed that he “pays more by offering food [and] shelter,” while another explains that his farm supplements wages by paying employees a bonus each year the farm participates in an auction based on the price earned at auction. Farmers who refrained from using CoE profits to raise wages claimed either that they “pay well already and do [not] want to pay too much causing problems with neighbors,” that they pay fairly because they comply with wage increases “as required by law,” or that, because of the farm’s belief that workers should be rewarded economically for hard work, wages are increased annually regardless of participation in the CoE. Interview responses also emphasize that improvements in living conditions did not stop workers from migrating to the city. Two respondents explained, however, that migration is driven by many factors unrelated to living conditions and is most likely due to the fact that the “amount of farm hands required during the year varies greatly... and, thus, [plantations] cannot support a large group of fixed workers” who are subsequently forced to migrate to the city to find work.

All farmers also responded that they used CoE profits to make considerable investments in their coffee fields and activities related with coffee production. Among the most popular investments were new equipment and tools but others gave more specific examples. One farmer commented that the profit “allowed [them] to reinvest heavily in the plantation” and change the number or variety of plants on the plantation and improve the way that soil, plant architecture, and growth are managed. Another was able to purchase twenty sheep whose manure is “mixed with composted fermented pulp” and used as organic fertilizer while another replanted the cardamom crops that it had planted during the coffee crisis. These are clearly significant investments and emphasize that CoE profits were not merely invested in social projects but to boost the farms’ productivity as well. However, because they were used to invest in programs that the literature agrees indicate progress towards human development, it is clear that they were used to make a considerable contribution to these goals.

2. Impact of EC profits on human development indicators

Farmers gave mixed responses when discussing whether profits earned at the EC were used to improve indicators related to human development on their farms or communities. Only one farmer specifically mentioned investing a portion of EC income in development programs. The farm allocates/d 10% of its total annual profit for “social responsibility projects,” and this profit includes the earnings received at the EC auctions. This percentage is generally spent to provide textbooks and physical education materials to community schools,” and the farmer admitted that “no other community improvements were made” with the auction profits. A second farmer claimed to have used EC profits

“in the same way” that it used CoE profits, which suggests that he did make investments to improve local living conditions, but did not provide specific examples. No other farms invested in human development projects. Half of farms also mentioned putting a portion of the earnings towards workers’ wages, either in the form of higher wages or to award them with a Christmas bonus during the years it participated in the EC.

The most popular use for the profit was to cover farm-related expenses. Expenses ranged from “reinvesting in the plantation” to improving working conditions in offices and mills, purchasing a truck to transport workers and crops, and costs associated with farm maintenance and administration. One farmer’s response, however, is particularly enlightening regarding the experience of at least half of EC participants. This farmer did not use the profit to cover farm expenses or invest in the farm, much less invest in social programs, because he “essentially made no extra money” from the auction because the costs involved in transporting the coffee and paying the post-auction commission canceled out the profit he earned from the premium. This respondent’s experience can also be extrapolated to other farms participating in the EC because he explains that many of the auctions’ participants “received even less” than his farm. Therefore, these responses indicate that EC profits were used to improve indicators associated with development but to a lesser extent than those earned at the CoE.

Factors contributing to spending differences

Two factors help explain why one auction overwhelmingly contributed to development while another had a smaller impact. The first and most frequently discussed by farmers was the difference between the amount of profit earned at each auction. Premiums at EC auctions were generally lower than those at the CoE, a fact reinforced by responses explaining that the farmer did not earn “a large quantity of money” at the EC, while another “essentially made no extra money,” and, “for about half of the others [participating] that year,” the auction was not “worth it” because of the financial costs involved. Because farmers either earned low profits or broke even at the EC, participating in this auction did not allow them to spend this income to improve living conditions and cover the cost of farm-related expenses. Therefore, the level of profit an auction generates for a farmer clearly impacts his/her spending choices and, consequently, whether conditions improve on his/her farm.

The second factor determining how each auction contributed to development is unrelated to the auction itself but rather to the individual farm; however, its role appears less decisive than the amount of profit earned. Understanding the living situation on each farm reveals that this variable strongly influences spending habits because farms with workers living on the property were more likely to use profits to improve living conditions on their farms while farms that did not house workers spent a larger portion the profit on farm-related expenses than on investments in their community. Comparing spending choices between the CoE and the EC illustrates that a farm’s priorities also influenced how it spent the profit. Because farms chose to use the EC profit to cover operating expenses and invest in the farm rather than implement social projects suggests that farm maintenance and improving productivity take priority over investing in social

programs. Because premiums earned at the CoE are generally higher than those earned at the EC, it is logical to conclude that CoE participation stimulated greater investment in social programs, etc because this auction provided farmers with the additional profit needed to make farm investments and still have extra money to invest in social programs.

Conclusion

In conclusion, farmers' responses provide initial support for the hypothesis that COAs indirectly promote human development because they provide farmers with the financial resources needed to invest in programs associated with human development indicators. Although further research is needed to determine the extent to which these investments have reduced poverty, it is important to note that the three indicators receiving the greatest investments from COA profits, education, healthcare, and malnutrition, were also the areas the 2004 World Bank report emphasized should receive the most attention in order to reduce poverty in Guatemala. However, the differences between how CoE and EC profits were spent highlights that these earnings were not inevitably used for such purposes and, therefore, it is misleading to claim that COA profits always contribute to advances in human development. Although factors such as the farm's housing conditions and its management's priorities influence spending decisions, the amount of profit earned was the pivotal factor in determining whether earnings were invested in social programs. Therefore, if COAs are to be incorporated into strategies targeting human development, it is essential that the appropriate mechanisms are in place to ensure that they generate high enough premiums that farmers still retain a profit after covering farm expenses.

In fact, this discrepancy in spending choices supports the claim that there is a dependent relationship between agricultural growth and poverty reduction. The difference between how CoE and EC profits were spent demonstrates that in order for farmers to improve living conditions on their farms and farming communities they first had to earn a profit that was high enough to cover both the cost of farm-related expenses and investments in social programs. The presence of factors that stimulate agricultural growth was crucial to facilitating these investments because farmers' ability to earn this profit depended on being able to enter and participate in a market offering above-market prices. Therefore, this comparison provides further evidence that changes in human development are contingent on the extent to which farmers can engage in activities associated with agricultural growth.

Chapter VIII: Conclusion

The above case study of competitive-online auctions for Latin American specialty coffees provides empirical and qualitative evidence that substantiates claims that Internet marketing is a “tool of development” (Schware 2005, xiii). They directly contribute to factors associated with short-term agricultural growth by improving vertical integration in the value chain, which generates a one-time price premium for farmers, and providing producers who are new to specialty coffee production with a way for to access this market. Achieving sustained growth, however, requires farmers to earn more than a single premium or simply qualify to enter this niche market, and interview responses indicate that COAs make an important contribution to long-term economic and human development because of their role in catalyzing activities associated with sustained

agricultural growth and poverty reduction. Negotiating long-term, above-market prices, engaging in new market opportunities, and improving local living conditions each involve multiple steps, and COAs were not designed to see each of these processes to their end. However, COAs may initiate these processes by establishing the foundation from which these three development strategies can be fulfilled and, therefore, should be viewed as a rural development tool.

Because specialty coffee COAs were designed, in large part, as a marketing tool, their strength as a development tool lies in their ability to improve a farmer's visibility and name recognition in an international market and to serve as a networking resource by bringing together a pool of producers and prospective buyers who meet each other's business interests. These capabilities allow COAs to contribute to rural economic development by providing farmers with the initial opportunities and resources needed to pursue new contracts and earn higher long-term prices that more accurately reflect the true, above-market value of their coffee. It is also possible that COAs' marketing ability allows them to contribute to rural human development through more than simply the auctions profits they generate because, by improving marketing, this strategy catalyzes long-term economic growth activities, such as experiencing greater market participation and entering into contracts offering long-term, above market prices. Profits from these activities may also be used to improve living conditions although further research is required to confirm this possibility.

It is important to recognize that COAs' role is only to instigate these activities, and one cannot guarantee that the benefits they offer will ultimately stimulate rural development. Although evidence in this thesis suggests that this Internet marketing

strategy has made notable contributions to agricultural growth and human development on specialty coffees farms, if COAs are to be organized for other commodities it is important to acknowledge the conditions that must first exist for them to prompt short and long-term above-market prices, new market opportunities, and improvements in living conditions. The auction must meet certain criteria in order for farmers to earn a price premium at the event: the commodity being auctioned must have a variety of quality attributes that influence price formation, the auction must attract bidders willing to pay premium prices despite knowledge of traditional market prices, and bidders must receive a significant amount of information about the quality of selected lots prior to the auction. The degree to which these conditions are met has implications for poverty reduction because earning a premium that allows farmers to sustain a profit after covering the auction commission and paying farm expenses is crucial for determining whether auction profits are used to improve living conditions.

Even if these conditions are met, other external influences may control the degree to which COAs contribute to agricultural growth. The auction's impact on the long-term price farmers earn and the new market opportunities they experience is contingent on the effort the auction program takes to promote communication between farmers and bidders following the auction, the initiative with which farmers follow-up with bidders, and the degree to which they utilize their improved reputation and greater name recognition and visibility in the market to market their product. The influence of these factors on whether growth and poverty reduction occurs following a COA further emphasizes that the role of COAs in the rural development process is that of a catalyst, an initiator, and that there are

many other variables that determine whether the resources it provides will lead to development.

Because to participate in a COA a farmer's crop must meet certain quality standards, it is important to consider whether the development COAs promote in unequal. It is possible that large farms capable of investing in the trees, washing stations, equipment, etc necessary to produce such high-quality dominate these events and, as a result, reap the development benefits they offer, because they have an advantage over small farms without the financial resources, labor force, or acreage to make such investments. Further research is required to determine whether the farms that participate in COAs represent the typical coffee farm in their respective countries or whether they are dominated by large farms and cooperatives. A survey of the participating farms may reveal the degree to which COAs contribute to a country's overall rural development strategy or whether their role in these efforts unintentionally encourages development to be concentrated on large farms.

Although competitive-online auctions are not a one-stop solution for rural development they are a strategy that tackles both the economic and human aspects of development. Furthermore, when examined in light of the hype surrounding the Internet's contribution to rural development, they offer initial evidence that the Internet, through Internet marketing, is capable of advancing development efforts if the right conditions exist.

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Appendix 1

Table 1. The average price premium earned at Cup of Excellence auctions

<i>Country</i>	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Bolivia	-	-	-	-	-	775.20	469.44	-	560.28	449.44
Brazil	85.79	198.07	631.44	732.26	647.53	729.97	599.79	537.90		548.68
Colombia	-	-	-	-	-	-	532.74 488.68	504.47 301.25	637.64	691.72
Costa Rica	-	-	-	-	-	-	-	-	325.36	334.45
El Salvador	-	-	-	-	654.64	293.64	438.24	501.43	391.67	334.16
Guatemala	-	-	870.92	621.08	-	-	-	630.67	658.44	785.10
Honduras	-	-	-	-	-	754.52	162.50	296.97	424.06	450.35
Nicaragua	-	-	-	506.44	425.43	491.71	255.50	382.82	531.36	415.30
Panama	-	-	-	-	-	-	-	-	-	-
Average % per year	85.79	198.07	751.18	619.90	575.87	609.01	420.98	450.88	504.12	501.15

Notes: Entries are in percentages. Each entry equals the average premium earned at the auction and was calculated by taking the average of each individual premium earned at auction. The “average percentage per year” equals the average premium earned in auctions in their respective year. Dashes indicate that an auction was not held that year. Some countries have more than one entry each year because they held more than one auction. Averages are not weighted by volume.

Table 2. The average price premium earned at SCAA auctions

<i>Country</i>	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Bolivia	-	-	-	-	-	-	-	-	-	-
Brazil	-	-	-	-	-	-	-	-	-	-
Colombia	-	-	-	-	-	-	-	-	-	-
Costa Rica	-	-	-	-	-	312.76	170.26	-	-	-
El Salvador	-	-	-	-	-	-	-	-	-	-
Guatemala	-	-	-	-	-	235.51	99.43	-	-	-
Honduras	-	-	-	-	-	-	-	-	-	-
Nicaragua	-	-	-	-	-	-	-	-	-	-
Panama	-	-	-	-	-	492.38	291.87	568.59	809.06	502.46
Average % per year	-	-	-	-	-	346.88	156.19	568.59	809.06	502.46

Notes: Entries are in percentages. Each entry equals the average premium earned at the auction and was calculated by taking the average of each individual premium earned at auction. The “average percentage per year” equals the average premium earned in auctions in their respective year. Dashes indicate that an auction was not held that year. Some countries have more than one entry each year because they held more than one auction. Averages are not weighted by volume.

Appendix 1 continued

Table 3. The average price premium earned at Q auctions

<i>Country</i>	<i>1999</i>	<i>2000</i>	<i>2001</i>	<i>2002</i>	<i>2003</i>	<i>2004</i>	<i>2005</i>	<i>2006</i>	<i>2007</i>	<i>2008</i>
Bolivia	-	-	-	-	-	-	-	-	-	-
Brazil	-	-	-	-	-	-	-	-	-	-
Colombia	-	-	-	-	-	-	-	-	-	-
Costa Rica	-	-	-	-	-	100.00	57.76 57.45	41.16	-	-
El Salvador	-	-	-	-	-	59.04	35.10 21.74	-	-	-
Guatemala	-	-	-	-	-	96.75	74.01 33.89	-	-	-
Honduras	-	-	-	-	-	-	32.69	-	-	-
Nicaragua	-	-	-	-	-	52.54	37.62	-	-	-
Panama	-	-	-	-	-	-	-	-	-	-
Average % per year	-	-	-	-	-	74.08	43.78	41.16	-	-

Notes: Entries are in percentages. Each entry equals the average premium earned at the auction and was calculated by taking the average of each individual premium earned at auction. The “average percentage per year” equals the average premium earned in auctions in their respective year. Dashes indicate that an auction was not held that year. Some countries have more than one entry each year because they held more than one auction. Averages are not weighted by volume.

Appendix 2

Below is a copy of the questionnaire that farmers answered via email; English and Spanish versions of the questionnaire were available (see next page for Spanish version). Although the questionnaire itself only addressed the Cup of Excellence, I asked farmers to discuss both the Cup of Excellence and the Exceptional Cup in their answers.

Questionnaire Instructions:

This questionnaire has nine questions and should take approximately 30 minutes to complete. Type your answer in the space provided and continue onto additional pages if necessary. *Please respond as completely as possible and provide specific examples.* Thank you for your cooperation!

Section 1: how the farm has benefited from participating in the auctions

1. What initially encouraged your farm to decide to enter into the Cup of Excellence auction?
2. Describe the direct benefits the farm receives/received from participating in these auctions. For example, describe how participating has impacted the farm's reputation among buyers, the price it receives from other buyers, and the profit it earns from its sales. Please feel free to provide examples of additional benefits not listed here.
3. Have the higher prices earned at auction allowed community members the financial freedom to engage in other income producing activities? Is so, please provide examples of these activities.
4. During the time that your farm has/had been participating in e-auctions, has there been less migration from the farm to the city?

Section 2: how the farm has used the profit earned from auctions

5. What percentage of the price you earn from the auctions is kept as profit for the farm?
6. How has this profit been used to improve living conditions within the community? Answers may include, *but should not be limited to*, descriptions of any improvements made to:
1) educational opportunities, 2) health care services, 3) nutrition in the community, 4) access to electricity, 5) access to potable water
7. Has the money been used for to increase wages for farm employees? If so, by how much?
8. Describe the types of capacity building programs, if any, the profit has been spent to fund or improve within the farming community.
9. Describe other ways that the profit has been used, such as to repay debt or purchase new equipment.

Appendix 2 continued

Below is a copy of the same questionnaire, translated into Spanish.

Instrucciones:

Este cuestionario tiene nueve preguntas y tomará aproximadamente treinta minutos de completar. Escriba a máquina su respuesta en el espacio suministrado y continúe en páginas adicionales si es necesario. *Por favor responda tan completamente como posible y provea ejemplos específicos. ¡Gracias por su cooperación!*

Sección 1: cómo la finca ha aprovechado de participar en las subastas en línea

1. ¿Qué indujo, inicialmente, que su finca entrara en la Taza de Excelencia?
2. ¿Cuáles son los beneficios directos que la finca recibe/recibió de participar en estas subastas? Por ejemplo, describa como su participación en las subastas ha impactado la reputación de la finca entre los compradores, el precio que recibe de otros compradores y las ganancias que gana de sus ventas. Por favor, siéntase libre de proveer ejemplos de beneficios adicionales no alistados aquí.
3. ¿Los precios ganados en la subasta han permitido a los miembros de la comunidad de la finca que tengan la libertad financiera de entrar en otras actividades que produzcan ingresos? Si es así, por favor provea ejemplos de estas actividades y si han sido exitosas.
4. Durante el tiempo que su finca ha/había participado en las subastas, ¿ha habido menos migración de gente de la finca a la ciudad?

Sección 2: cómo la finca ha usado la ganancia ganada en las subastas en línea

5. ¿Qué porcentaje del precio que usted gana de las subastas se guarda como ganancia para la finca?
6. ¿Cómo ha usado esta ganancia para mejorar las condiciones de vida en la comunidad? Respuestas pueden incluir, *pero no deben ser limitadas a*, descripciones de mejoramientos hechos a: 1) oportunidades educacionales, 2) servicios del cuidado de la salud, 3) nutrición en la comunidad, 4) acceso a la electricidad, 5) acceso al agua
7. ¿La ganancia ha sido usada para aumentar los salarios de los empleados de la finca? Si es así, por cuanto?
8. Describa los tipos de programas para el desarrollo de habilidades, si hay, en los cuales la ganancia ha sido gastada para financiar o mejorar en la comunidad de la finca.
9. Describa otras maneras que la ganancia ha sido usada, tal como pagar deudas o comprar nuevo equipo.